

DOCUMENTS DEPT.

Jul 1 1987

STATE OF CALIFORNIA  
PUBLIC LIBRARY

VOLUME II:  
**PHOTOGRAPH INDEX**  
TO

*California Highways and Public Works*  
**1937-1967**



**D**

State of California  
California Department of Transportation

REF  
625.7  
C126i  
37/67  
v.2



GOVERNMENT INFORMATION CENTER  
SAN FRANCISCO PUBLIC LIBRARY

SAN FRANCISCO  
PUBLIC LIBRARY

REFERENCE  
BOOK

Not to be taken from the Library

[12



**VOLUME II:**  
**PHOTOGRAPH INDEX**  
to  
*California Highways and Public Works*  
**1937-1967**



Compiled by:  
Jill Hupp  
Environmental Program,  
Cultural Studies Office



California Department of Transportation, Sacramento, June 1997

REF 625.7 C126i 37/67  
v.2  
Hupp, Jill.

Index to California  
highways and public  
1997.

3 1223 04631 3707

S.F. PUBLIC LIBRARY



**CALTRANS  
ENVIRONMENTAL PROGRAM  
CULTURAL STUDIES OFFICE  
1120 N Street, M.S. 27  
Sacramento, CA 95814**

**(916) 653-0647**

**JUNE 1997**

**Copies available from the Caltrans Publications Distribution Unit for \$25.00  
(includes sales tax, shipping and handling). Please make checks payable to  
"Caltrans," and mail to:**

**Caltrans Publication Unit  
1900 Royal Oaks Drive  
Sacramento, CA 95815-3800  
(916) 323-5606**

**We do not accept purchase orders or orders by fax To place an order using your  
Visa or Mastercard, please call (916) 445-3520.**



Digitized by the Internet Archive  
in 2015

<https://archive.org/details/indexlocaliforni1937hupp>

# TABLE OF CONTENTS

Introduction and Acknowledgments .....	v
--	---

## PHOTOGRAPH INDEX SUBJECTS

ACCIDENTS .....	4
ARCHAEOLOGY & PALEONTOLOGY .....	4
AWARDS .....	5
BRIDGES .....	5
BUILDINGS .....	27
CALIFORNIA HIGHWAY COMMISSION .....	30
CONVICT LABOR .....	30
CULVERTS .....	31
DAMS & CANALS .....	33
DIVISION OF HIGHWAYS .....	35
DOCUMENTS & RECORDS .....	35
EDUCATION .....	37
ENVIRONMENTAL ISSUES .....	37
EQUIPMENT .....	37
EROSION CONTROL .....	44
EVENTS .....	50
FERRIES .....	52
FLOODING .....	53
FREEWAYS .....	61
GRADE CROSSINGS, SEPARATIONS & INTERCHANGES .....	62
HIGHWAY PLANNING & DESIGN .....	72
Photogrammetry .....	72
HISTORIC LANDMARKS & MONUMENTS .....	73
Missions of California .....	73
HISTORY: PEOPLE, PLACES & HISTORIC EVENTS .....	74
INFORMATIONAL SERVICES .....	76
Exhibits By Division of Highways .....	76
LANDSCAPE & LANDSCAPE MAINTENANCE .....	76
Litter Removal .....	77
Roadside vegetation removal/control .....	78
Trees .....	79
LEGISLATION .....	80
LITIGATION / LEGAL .....	80
MAINTENANCE .....	80
MOTOR VEHICLES .....	81
NATIVE AMERICANS .....	81
NATURAL DISASTERS .....	82
PAVEMENT & PAVING .....	82
PERSONNEL/EMPLOYMENT-RELATED .....	87
REST STOPS & VISTA POINTS .....	88
RIGHT OF WAY .....	88
ROAD CONSTRUCTION .....	89
Road Construction Outside California .....	90
ROADSIDE BUSINESSES & BYPASSES .....	93
ROUTES .....	94
By County .....	94
By Number .....	166

## TABLE OF CONTENTS

SAFETY .....	166
Curbs .....	166
Employee Safety .....	166
Guard Rails .....	167
Lighting .....	167
Medians .....	167
Pavement Markings .....	168
Traffic Bars .....	168
SCENIC HIGHWAYS .....	169
SCENIC/RECREATIONAL AREAS .....	169
SIGNALS .....	171
SIGNS .....	171
SNOW .....	173
Removal .....	174
TECHNOLOGY .....	176
Data Processing/Computers .....	176
Radio Communications .....	176
TRAFFIC .....	177
TUNNELS & TUBES .....	178
UTILITIES .....	182
WORLD WAR II-RELATED .....	182
 PEOPLE INDEX .....	 183
Employees .....	183
Non-Employees .....	191
 COVER ILLUSTRATIONS .....	 193

## INTRODUCTION AND ACKNOWLEDGMENTS

This two-volume index is meant to aid those wishing to use the *California Highways and Public Works* journal as an historic reference. An index to the earlier volumes, 1912-1936, was produced in 1937.<sup>1</sup>

The project was made possible by CALTRANS and the CSUS Foundation (California State University-Sacramento), and could not have been accomplished without the following:

Gregory King, Chief, History, Architecture and Community Studies (HACS) Branch, who originally brought the need for an index to the attention of the Environmental Program, and oversaw the entire project. His support and assistance throughout the indexing process was greatly appreciated.

Dr. Kenneth Owens, head of the Capitol Campus Public History Program, CSU-Sacramento, who suggested one of his graduate students for the job, and served as the project's research advisor.

Steve Dondero and Sheila Mone, who kept the contractual and financial end of the project running smoothly.

The Caltrans Transportation History Center librarians Laurel Clark and Edith Darknell. Many thanks for their helpful comments during the development of the index.

Barbara McDonnell and her entire Cultural Studies Office staff, whose encouragement and positive feedback made the project so much easier. Dorene Clement merits an extra thank you for proof-reading the final draft. Her suggestions helped to make the finished product much more aesthetically pleasing.

Public Historians are trained to serve as research historians, archivists, and museum curators, working within the community at large, rather than on the staffs of academic institutions. "Public History" is really about local history, which can be found throughout a community in its libraries and archives in the form of court documents, engineering reports, newspaper accounts, diaries, and countless other historical records. Knowledge of a community's history is important for the protection and preservation of its cultural resources. Public historians turn to the past in order to help solve contemporary problems regarding such issues as water rights, housing arrangements, land use, and neighborhood patterns. The Public History Program at CSU-Sacramento is structured to help history students acquire the skills and background necessary to succeed in the historical field outside of the academic world.

---

<sup>1</sup> John W. Howe, ed. *Index and List of Illustrations for California Highways and Public Works*. Sacramento: California State Printing Office, 1937.



## MAIN SUBJECT HEADINGS

### ACCIDENTS

### ARCHAEOLOGY & PALEONTOLOGY

### AWARDS

### BEAUTIFICATION--See LANDSCAPE & LANDSCAPE MAINTENANCE

### BRIDGES

### BUILDINGS

### BYPASSES--See ROADSIDE BUSINESSES & BYPASSES

### CALIFORNIA HIGHWAY COMMISSION

### CONVENTIONS--See EVENTS

### CONVICT LABOR

### CULVERTS--See also EROSION CONTROL

### CURBS--See SAFETY

### DAMS & CANALS

### DIVISION OF HIGHWAYS--See also PERSONNEL/EMPLOYMENT RELATED

### DOCUMENTS & RECORDS

### DRAINAGE--See EROSION CONTROL

### EDUCATION

### ENVIRONMENTAL ISSUES--See also LANDSCAPE & LANDSCAPE MAINTENANCE

### EQUIPMENT

### EROSION CONTROL--See also FLOODING

### EVENTS

### EXHIBITS--See INFORMATIONAL SERVICES

### FERRIES

### FLOODING

### FOREST HIGHWAYS--See ROAD CONSTRUCTION

### FREEWAYS

### GRADE CROSSINGS, SEPARATIONS & INTERCHANGES

### GUARD RAILS--See SAFETY

### HIGHWAYS--See ROUTES

### HIGHWAY PLANNING & DESIGN

### HISTORIC LANDMARKS & MONUMENTS

### HISTORY: PEOPLE, PLACES & HISTORIC EVENTS--See also EVENTS

### INFORMATIONAL SERVICES

### INTERCHANGES--See GRADE CROSSINGS, SEPARATIONS & INTERCHANGES

### LANDSCAPE & LANDSCAPE MAINTENANCE

### LEGISLATION

### LIGHTING--See SAFETY

### LITIGATION / LEGAL

### LITTER REMOVAL--See LANDSCAPE & LANDSCAPE MAINTENANCE

### MAINTENANCE--See also SNOW; LANDSCAPE & LANDSCAPE MAINTENANCE; EQUIPMENT

### MEDIANS--See SAFETY

### MOTOR VEHICLES--See also TRAFFIC

### NATIVE AMERICANS

### NATURAL DISASTERS--See also FLOODING

### ORGANIZATION OF DEPARTMENTS--See DEPARTMENT OF PUBLIC WORKS

### OUTDOOR ADVERTISING

### PALEONTOLOGY--See ARCHAEOLOGY & PALEONTOLOGY

### PAVEMENT MARKINGS--See SAFETY

## MAIN SUBJECT HEADINGS

PAVEMENT & PAVING--*See also EQUIPMENT, Paving Related*  
PEOPLE--*See PEOPLE INDEX*  
PERSONNEL/EMPLOYMENT-RELATED  
PUBLIC RELATIONS--*See INFORMATIONAL SERVICES*  
RECORDS MANAGEMENT--*See DOCUMENTS & RECORDS*  
REST STOPS & VISTA POINTS  
RIGHT OF WAY  
ROAD CONSTRUCTION  
ROADSIDE BUSINESSES & BYPASSES  
ROUTES  
SAFETY--*See also ACCIDENTS*  
SCENIC HIGHWAYS  
SCENIC/RECREATIONAL AREAS, STATEWIDE  
SIGNALS  
SIGNS  
SNOW  
TECHNOLOGY--*See also EQUIPMENT; PAVING*  
TRAFFIC--*See also MOTOR VEHICLES*  
TRAINING--*See EDUCATION; PERSONNEL/EMPLOYMENT*  
TREES--*See LANDSCAPE & LANDSCAPE MAINTENANCE*  
TUNNELS & TUBES  
UTILITIES  
VISTA POINTS--*See REST STOPS & VISTA POINTS*  
WORLD WAR II-RELATED



# List of Abbreviations:

AAPT . . . . . Association of American Paving Technologies  
AASHO . . . . . American Association of State Highway Officials  
AISC . . . . . American Institute of Steel Construction  
APWA . . . . . American Public Works Association  
ARBA . . . . . American Road Builders Association  
ARWA . . . . . American Right-of-Way Association  
ASCE . . . . . American Society of Civil Engineers  
ASF . . . . . Automobile Safety Foundation  
BHIF . . . . . Better Highways Information Foundation  
BPR . . . . . Bureau of Public Roads  
CH & PW . . . . California Highways and Public Works  
CHC . . . . . California Highway Commission  
CPUC . . . . . California Public Utilities Commission  
CTBA . . . . . California Toll Bridge Authority  
CSAA . . . . . California State Automobile Association  
DHE . . . . . District Highway Engineer  
DBTC . . . . . Division of Bay Toll Crossings [formerly DSFBTC]  
DSFBTC . . . . Division of San Francisco Bay Toll Crossings  
DWR . . . . . Division of Water Resources  
FAS . . . . . Federal Aid Secondary [Highway Program]  
FHA . . . . . Federal Highway Administrator  
ITE . . . . . Institute of Traffic Engineers  
ITTE . . . . . Institute of Transportation and Traffic Engineering  
NAS . . . . . National Academy of Sciences; Naval Air Station  
NPA . . . . . National Production Authority  
NRC . . . . . National Research Council  
PCI . . . . . Prestressed Concrete Institute  
PVS . . . . . Professional and Vocational Standards  
PW . . . . . Public Works  
SP . . . . . Southern Pacific [Railroad]  
UOP . . . . . University of the Pacific  
WASHO . . . . . Western Association of State Highway Officials

Alt. . . . . Alternate  
Br. . . . . Bridge  
Bus. . . . . Business  
Fwy. . . . . Freeway  
Hwy. . . . . Highway  
Leg. Rt. . . . . Legislative Route  
Pkwy. . . . . Parkway  
RR . . . . . Railroad  
Rt. . . . . Route

## Key

Levr. . . . . Inner cover

C. BC . . . . . Cover, Back Cover

highway names/numbers in brackets . . . . . [denotes former route names/number]



## ACCIDENTS

- Accident spots pinpointed on district map to identify troublesome spots.  
 Accident which occurred in daytime on paved road.  
 Car and truck accident on Bayshore Hwy. [US 101] near S.F.  
 Construction accident; truck on its tailgate on small ledge of rock.  
     Tow line attached to truck.  
     Undamaged truck ready to resume operations  
 Electronic data processing equipment used to identify high accident  
     locations on state highway system.  
 Emergency first aid training  
     Highway first aid crews, group photo.  
     Maintenance men illustrating first aid treatment for accident victim.  
 Fog; visibility on freeway with and without fog.  
 Head on collision of truck and car on highway.  
 Hole in fence along I-10 (San Bernadino Fwy.), which led to pedestrian's death.  
 Minor collision on freeway.  
 National Safety Council poster for traffic signs.  
 State car in parking lot, and after being hit by pickup truck on Rt. 99.  
 Stop signs, cross-road warning signs at site of accident (Alameda Co.).  
 Traffic accident on unidentified stretch of highway.  
 Wreckage from airplane/truck collision on state highway.
- J/A '65 p34  
 Aug '38 p8  
 S '37 p13  
 M/A '51 p49  
 M/A '51 p49  
 M/A '51 p49  
 J/A '65 p37  
 O '37 p14  
 O '37 p4  
 M/J '65 p23  
 Aug '38 p9  
 S/O '48 p37  
 J/A '56 p12  
 S '37 p18  
 M/J '61 i.cvr  
 S/O '47 p8  
 Apr '39 p2  
 F '42 p19

## ARCHEOLOGY & PALEONTOLOGY

### Caldecott Tunnel fossils

- Aphelops joined together by U.C. paleontologists.  
 Hipparian jawbone and teeth sections found in tunnel bore.  
 Pieces of leg bone of long extinct rhinoceros.  
 Place in tunnel where fossils were found.  
 Fish fossil found during excavation of Ft. Moore Hill in L.A.
- J/F '63 p51  
 J/F '63 p50+  
 J/F '63 p51  
 J/F '63 p51  
 M/J '51 p46

### Los Angeles Co. Museum of Natural History

- Children viewing exhibits in La Brea Hall.  
 Dinosaur bone piece kept available for children to touch.  
 Dr. Reid MacDonald, senior curator of vertebrate paleontology.  
 Imperial mastodon skeleton at the museum  
 Schoolboy with fossil vertebrate at museum exhibit.  
 Teacher and class inspecting skeleton of *Antrodemus valens*.  
 Placer Co., I-80 [US 40]; 30 million-year-old gravel deposits near Gold Run.  
     Tertiary-Age river channel exposed by cut banks near Gold Run.
- J/A '66 p15  
 J/A '66 p15  
 J/A '66 p14  
 J/A '66 p15  
 J/A '66 p12  
 J/A '66 p15  
 M/A '46 p27  
 M/A '46 p28

### San Diego Co.

#### Batiquitos Lagoon archaeological sites

- Aerial view of archeological sites.  
 Batiquitos Lagoon in winter.  
 Detail of recovered artifacts.  
 Excavation in progress.  
 Profile of pit with column sample removed.  
 Shell midden exposed by road cut.  
 Stone features of a site.  
 "Chula Vista Whale;" schoolchildren who discovered fossils.  
     Schoolchildren and teacher excavating around find.  
 Towle Powder Mill burrstones being assembled at Sutter's Ft.  
 UCLA archeology students working at test pits site on Rt. 1 right-of-way north of  
     Cambria (San Luis Obispo Co.).  
     Students digging test pits, screen dirt and recovering artifacts.
- M/J '61 p46  
 M/J '61 p51  
 M/J '61 p49+  
 M/J '61 p47  
 M/J '61 p49  
 M/J '61 p47  
 M/J '61 p47  
 J/A '66 p13+  
 J/A '66 p14  
 S '37 p16  
 M/A '66 p10+  
 M/A '66 p11

## AWARDS

Abrams Award winner L.L. Funk and photogrammetry exhibit. M/J '59 p14  
ASCE engineering award [I-80, trans-Sierra route]  
Official party at plaque dedication with 1927 Stutz Blackhawk. J/A '66 p16  
ASCE "7 Civil Engineering Wonders" of U.S. award for Bay Bridge. M/A '58 p23  
Bartlett (George S.) Award inscribed to Charles H Purcell. J/F '45 p7  
"Boneroo Stag" awards [best contracts] N/D '52 p48; M/J '53 p64;  
J/F '54 p37; M/J '54 p30; M/J '56 p49; J/A '57 p25; J/A '58 p48; M/A '60 p62  
Bridge awards; display of prize-winning bridges 1964 on exhibit at PW Building. N/D '64 p57  
**Employee-related Awards**  
Merit Award recipients J/F '51 P37; S/O '51 p55; J/F '51 p57  
Safety Awards  
Alan S. Hart receiving award for best accident prevention, Dist. 3. J/A '59 p38  
Gov. Warren presenting traffic safety awards. J/A '53 p3  
Superior accomplishment award being presented to Jack Snell J/A '66 p32  
25-year-service award presented to Fred J. Grunm N/D '52 p38  
25-year-service award recipients and PW officials, group photo S/O '51 p62  
Governor's Design Award certificates [transportation]. J/F '67 p37  
Hewes (Dr. L.I.) Award. S/O '54 p33; M/A '62 p8; J/A '64 p19  
Highway Research Board Award [best paper] recipients. J/F '58 p60  
Institute of Traffic Engineers (ITE) Award M/J '49 p33; S/O '60 p63  
Landscaping Award; first place trophy for L.A. freeway plantings. J/F '54 p37  
McDonald (Thomas H.) Award [AASHO]. J/F '59 p21  
National Safety Council Traffic Safety Awards J/A '48 p11; J/A '62 p20; S/O '64 p60  
*PARADE* Magazine Scenic Highway Award  
J. C Womack accepting *PARADE* Scenic Highway award. M/A '66 p33  
Local officials with *PARADE* award before Div. of Hwys. exhibit. M/A '66 p34  
Posing for press photos with *PARADE* award plaque. M/A '66 p35

## BRIDGES

### Accidents, bridges and general

Accident caused by ineffective rails. S/O '45 p12  
Damage to bridge caused by two vehicles attempting to pass. S/O '45 p11  
Truck trailer causes collapse of bridge across Rio Hondo. N/D '45 p33  
Truss span over Woods Cr. demolished by truck. Mar '38 p4  
Arch bridge, 1940s J/A '44 p13

### Bridges needing improvement/replacement, general

Bridge unable to carry legal load because of light design; J/A '44 p14  
Bridge typical of many structures in need of replacement. M/A '47 p2  
Bridges needing improvement, Dist. 3. Aug '38 p1  
Decay in bents of timber overhead structure (note deck settlement). D '40 p3  
Disintegration of beam due to defect in expansion detail. D '40 p3  
Emergency repairs to antiquated wooden structures. F '38 p15  
Light, narrow bridge posted and likely to collapse. D '40 p2  
"Must replace" bridge which is weak and structurally unsound. J/A '44 p14  
One-way timber suspension span reinforced by additional hangers. D '40 p3  
Serious cracking in girder span due to inadequate expansion detail. D '40 p2  
Support piles weakened by marine borers. D '40 p2  
Timber truss bridge which collapsed under truck and trailer. D '40 p1  
Type of bridge on which loads must soon be restricted. J/A '44 p13  
Unidentified older bridge. Apr '39 p2  
Weakening due to poor concrete pile and abrasion by floating drift. D '40 p2  
California Toll Bridge Authority, group shot Jun '39 p2; S/O '56 p14

## BRIDGES, Continued

China; Taiwan, arch bridge constructed at Formosa.

J/F '54 p52

### Covered bridges

Bridgeport covered bridge over Yuba River.

S/O '50 p118

Clear Creek covered bridge (Humboldt Co.)

N/D '50 p12

Dillon Creek covered bridge. (Humboldt Co.)

N/D '50 p13

O'Byrne's Ferry bridge over Stanislaus River.

S/O '50 p118

Salmon River covered bridge in Siskiyou Co., removed in 1942.

M/J '52 p11

### Desert bridges

Removing surfacing from desert bridge preparatory to redecking.

J/A '49 p55

Salvaged pieces of laminated flooring from desert bridge.

J/A '49 p54

Typical desert alignment and desert bridge.

J/A '49 p55

Typical desert structure after placing concrete deck and new railing.

J/A '49 p54

Highway bridges; late 1940s structure with light steel rail, uniform depth beams, and light but strong steel columns for support.

J/A '49 p52

### Historic bridges (pre-1937)

1933 structure with solid rail, curved bottom cord girders, and heavy concrete piers built to skew of railroad track.

J/A '49 p53

Bridge built by the Padres, Santa Barbara Co.

S/O '50 p114

Cast-in-place arches over Arroyo Quemada, 1917

S/O '50 p121

Cattle Pass, unidentified locale.

M/J '52 p12

Fern Br., longest of type when built in 1911 (Eel Rvr.)

S/O '50 p123

Inadequate bridge of type built in 1880s and 1890s.

S/O '50 p91

Remains of Mokelumne Rvr. bridge at Lancha Plana, built in 1856.

S/O '50 p119

Yuba River open-spandrel arches at Parks Bar, 1913

S/O '50 p121

Woodcuts of typical Pioneer Era bridges.

S/O '50 p116

Wooden bridge on Redwood Hwy. alignment.

M/J '64 p9

Load testing [foundation] operations

N/D '50 p36+; N/D '60 p54

### Maintenance, structural

#### Bulkhead and Abutment Replacement

Abutments using "cross-overs" made of salvaged 6-in. planks.

J/F '45 p19

Bridge after repair of decayed bulkhead planks.

J/F '45 p16

Bridge repaired using existing "dead-man" rods.

J/F '45 p20

Corrugated sheet metal backing used to protect stringer ends.

J/F '45 p18

Counterforted type of abutment.

J/F '45 p19

Dry rot damage to timber bridges, examples of

J/F '45 p19

"L" type construction used to save concrete in new footing.

J/F '45 p19

Damaged Trinity River Br. with temporary repairs underway.

M/J '45 p7

#### Expansion Detail Failure

Concrete cap shattered by expanding and contracting of girders.

N/D '40 p17

Cover plate type of deck joint armor and subsequent failure.

J/F '46 p27

Damage to expansion assembly due to excessive pier movements.

J/F '46 p24

Failure of deck joint edge armor.

J/F '46 p24

Failure of membrane type joint due to contraction and expansion.

J/F '46 p25

Flexible piers added on Bear River Br.

J/F '46 p24

Samson Slough Br. before/after repair work to bearing failure.

J/F '46 p26

Spalled areas under expansion plate.

J/F '46 p24

Floor beams strengthened by truss beam method.

M/J '45 p7

California Highways and Public Works  
PHOTOGRAPH INDEX 1937-1967

## BRIDGES, Continued

### Piling Maintenance

Damaged pile.	M/A '45 p5
Ground line decay in untreated piles.	M/A '45 p6
Pedestals for stubbing decayed posts and piles.	M/A '45 p7
Pile encasement repair work on Newport Bay Br.	J/F '47 p38
Pile with decay developing from top.	M/A '45 p5
Posts daubed with toxic salt wood preservative.	M/A '45 p8
Rotted end of removed pile.	M/A '45 p6
Steel piles encased in reinforced concrete collars.	M/A '45 p5
Repair of traffic damage on Kings Slough Br.	M/J '45 p5

### Scour and Settlement Problems

Buttress fill ripped with sacked concrete, Kings River, Rt. 41	J/A '45 p19
Jacking superstructure back to grade, Big Tujunga Wash.	J/A '45 p18
Sacked concrete riprap under construction, Big Tujunga Wash.	J/A '45 p18
Scour damage to Granite Canyon Br., Rt. 155 [Rt. 142], Kern Co.	J/A '45 p18
Scour damage to Poso Creek Br., Rt. 99, Kern Co.	J/A '45 p19

Timber trestle bridges, repairs to

Models of Bridges	O '40 p27; F '42 p10
Painting; corrosion resistance testing	M/A '65 p60
Mobile bridge painting operations	May '42 p17
Orthotropic bridge for research purposes.	N/D '65 p27

### Railings and Curbs

Bridge railing which obstructs view of vehicle approaching on crest vertical.	J/F '51 p51
Impact test being conducted to test design of bridge rails.	N/D '65 p41
Narrow bridge with substantial curbs replacing inefficient ones	S/O '45 p12
Structures before and after new curbs and rails.	S/O '45 p13
Vehicle encroaching on opposing traffic lane of narrow bridge.	S/O '45 p11

Replacement of bridges by culverts and fills

Bridge, and replacement of same by pipe and fill	M/A '47 p24
Cattlepass bridge before/after replacement by fill.	M/A '47 p25
Long trestle before/after replacement by culvert.	M/A '47 p26
Short span trestle, and after replacement with concrete arch.	M/A '47 p26
Sidehill viaduct, same spot after fill replacement.	M/A '47 p24
Trestle before and after replacement with culvert.	M/A '47 p27

Steel Welds; Applying film to welded area before making radio-graphic check for hidden flaws.

J/F '67 p11

Truss span being assembled at Virginia Bridge Co. plant.

N/D '48 p46

## Bridges By County

### Alameda Co.

Alameda Creek Br., four-lane improvement (Niles).	N '37 p19
Alameda Creek Br. and overhead four miles east of Niles.	M/A '48 p10+
Altamont Br., traffic violation and hazards on.	O '37 p19
Alvarado--Niles Rd. Overcrossing at Nimitz Fwy. [Eastshore Fwy.]	M/A '58 p47
Arroyo Del Valle Br. (Santa Rita Rd., Pleasanton).	S/O '59 p47
Cypress St. double-deck viaduct-- (Nimitz Fwy., I-880)	
Under construction [first double-deck freeway structure in state]	J/F '57 p34
Dedication; official party at ribbon-cutting ceremony	J/A '57 p43
Crowd at Cypress St. Viaduct dedication.	J/A '57 p43
Caravan of cars using new facility.	J/A '57 cover
Double-deck Cypress St. structure.	M/A '58 p14
Dry Creek Br. on Alvarado--Niles Rd.	M/A '58 p47

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES Alameda Co., Continued**

El Cerrito Overhead, section of deck cut to increase skid resistance.	J/F '63 p44
Highway bridge near Dublin being instrumented as part of design study.	N/D '65 p30
Niles Canyon; one of two eliminated bridges on realigned route.	N '40 p8
Posey (Alameda) Tube Overcrossing.	M/A '54 p11
San Francisco-Oakland Bay Br.--See <i>San Francisco Co.</i>	
San Leandro Bay Br., opened July 1, 1953	J/A '53 p47
Close-up of span being opened.	J/A '53 p47
San Leandro Bay Br., built by a narrow gage railroad in 1881.	M/A '51 p55
San Leandro Creek Br. and approaches under construction, San Leandro (I-580).	M/A '50 p11
San Lorenzo Creek Channel Br. (Mattox Rd. and E. 14th St., Hayward).	J/F '61 p64

**Alpine Co.**

Raymond Meadow Creek concrete bridge, Rt. 4.	N/D '64 p54
Old Twin Lakes Br. ca. 1923-25, now at bottom of lake. (Rt. 88)	S/O '51 p24

**Amador Co.**

Consummes Rvr. Br., installing new truss	M/A '44 p20
Consummes River Br. near Plymouth, and old timber truss span.	J/F '53 p17
Dry Creek Br., imaginative pier design.	N/D '66 p26
Mokelumne River, narrow bridge on Rt. 49 (Mother Lode Hwy.)	Mar '39 p11
Mokelumne River Br. near Jackson under construction.	J/F '53 p19

**Butte Co.**

Bidwell Bar, old bridge [ca. 1856] across S. Fork of Feather Rvr.	M/A '47 p2
Bidwell Bar suspension bridge over Middle Fork Feather Rvr.	S/O '50 p120
Bridge across penstocks of PG&E's Cresta plant, Feather River Cyn.	M/J '52 p15
Butte City Br. dedication	J/F '49 p46
Feather River Br., reflooring (Rt. 70 at Oroville).	N/D '44 p10
West Branch Br. (Feather River, Rt. 70) [US 40-Alt.], drawing of proposed span.	M/J '57 p28
Under construction	N/D '60 p59; M/J '62 p3+
Completed span	M/J '62 p2; N/D '62 p54; M/J '64 p63

**Calaveras Co.**

Murray Creek Steel pony truss bridge, demolished in 1949.	J/F '53 p17
N. Fork Calaveras River bridge near San Andreas.	J/F '53 p17

**Contra Costa Co.**

Antioch Toll Br. (I-80) [US 40].	Jun '40 p3; Aug '40 p3; J/A '45 p10
repairs made to	M/A '53 p31
<b>Carquinez Toll Br. (I-80) [US 40].</b>	Jun '40 p2
Bridge on original dedication day, 21 May, 1927.	May '42 p2
Original Carquinez span under construction, 1927.	M/A '57 p42
Ceremony officially opening bridge under state ownership.	S '40 p1+
Drawing-photo of existing bridge and proposed parallel span.	J/A '55 p2
Model of truss and towers for Carquinez parallel bridges.	J/A '55 p3
Gov. Knight and Legislators who sponsored Carquinez Br. bill.	J/A '55 p5
Engineers gathered at site of parallel span.	J/F '56 p29
First day of bidding on four Carquinez Br. projects.	J/F '56 p30
Parallel span under construction	S/O '56 p26+; J/F '57 p41;
	M/A '57 p40+; J/A '57 p36+; M/A '58 C. p28+; J/F '59 p7+
Completed parallel Carquinez Br.	J/F '59 p1
Final closure between two cantilever arms.	J/F '59 p3
Official party at ribbon-cutting ceremony.	J/F '59 p3
View of both spans.	J/F '59 p11, 45; M/A '59 p28+
Riveting used to create "lacework" on older Carquinez Br.	M/A '62 p9
Perforated box girders on new Carquinez Br.	M/A '62 p9
High-strength steel and modern welding techniques on new span.	M/A '62 p10

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES Contra Costa Co., Continued**

Pacheco Slough Br., which is to be replaced.	M/A '47 p7
Pedestrian undercrossing [unidentified locale]	M/J '52P11
Pinole, I-80; bridge construction near railroad tunnel.	F '39 p21
<b>Richmond--San Rafael Br.</b>	
Under construction	N/D '53 p3+; M/A '54 p21+; M/J '55 p45+
Trestle connecting old ferry pier with permanent construction.	M/A '54 p20
Diver C.H. Wendell, who had near-fatal accident while working on bridge, and diver's tender who saved his life.	M/J '54 p60
Gov. Knight and party on partially completed upper deck.	N/D '54 p21
Nearly completed bridge, showing gap in east cantilever span.	M/J '55 p39
Completed bridge	J/A '56 p2; S/O '65 p50
Aerial view of North Bay crossing	J/A '56 p3
Gov. and Mrs. Knight with bronze plaque placed on granite stone at toll plaza 's Administration Building.	S/O '56 p12
Official party at dedication.	S/O '56 p13
Approaches to toll plaza, Contra Costa Co. side.	S/O '56 p15
Toll collector awaiting first automobile to cross bridge.	S/O '56 p16
Building upper deck permanent approach; old ferry wharf.	S/O '56 p16
Ten-millionth driver to cross bridge	M/J '60 p68
Checking anchor bolts, damaged when ship collided with pier.	N/D '65 p51

**Del Norte Co.**

Douglas Memorial Br. over Klamath River at Klamath.	S/O '50 p151
Howard Griffith Memorial Br. (M. Fork Smith Rvr., Crescent City)	J/F '64 p28
Smith River Br. built 1907 of poor material.	Mar '37 p8
Smith River Br., contrasting views of new and old spans	Apr '41 p5
S. Fork of Smith River; old suspension bridge, replacement span.	N/D '49 p11
Wilson Creek Br. on US 101.	M/A '57 p67
Old low-level bridge across Wilson Cr.	M/A '57 p68

**El Dorado Co.**

Aukum River Br. construction area	M/A '61 p27
Aukum Road Br. across N. Fork Cosumnes Rvr.	M/A '61 p29
Chili Bar Br.	M/J '52 p44
Coloma; bridge across S. Fork of American River; Wooden 1928 span.	J/F '53 p20
Hastings Creek bridge (Rt. 49 north of Coloma).	J/A '63 p18
Stone Arch Br. on Lake Tahoe Wagon Rd. (US 50), construction of.	S/O '50 p91
Webber Creek Br. (US 50 near Placerville), old span.	F '37 p19
Replacement bridge, completed	Jul '38 p10
Twin span under construction at night	N/D '61 p36
Completed twin span, winner of AISC award.	J/F '65 p41

**Fresno Co.**

Fresno; Tuolumne St., Stanislaus St. one-way bridges	S/O '58 p36
Hot Springs Canyon Creek bridge (Rt. 198, Colinga--San Lucas)	J/A '51 p24
Kingsburg; bridge across Kings River under construction.	D '39 p10+
Kings River Br. with abutments and center pier complete.	Jul '38 p4
San Joaquin Rvr. one-way bridge near Fresno. (Rt. 41) [Rt. 125]	N '38 p2
Tuolumne St. one-way bridge over SP RR, G St. and H. St., (Fresno).	J/A '57 p12
Warthan Creek "sea-going bridge" anchored by cable (Rt. 198).	Aug '42 p2
Washout of culvert and bridge, bypassed by Rt. 198 realignment.	Aug '42 p2
White's Br., collapsed due to overloaded truck; Reconstructed bridge.	M/A '47 p15

**Glenn Co.**

Sacramento Rvr. overflow channel causeway (Willows--Butte City).	N/D '61 p15
Swing bridge across Sacramento Rvr. at Hamilton City, built 1908.	M/J '52 p11



## BRIDGES, Continued

### Humboldt Co.

Clear Cr. covered bridge replaced by new structure.	N/D '50 p12
Dillon Creek covered bridge replaced by modern structure.	N/D '50 p13
Dyerville Br. across Eel River.	M/J '56 p28
Eagle Point Viaduct (US 101) under construction	J/F '62 p4+; N/D '62 p18
Completed structure	S/O '64 p21+
Eel River Br. at Rio Dell, washed out in 1964 flood.	N/D '65 p56
Repaired structure	N/D '65 p56
Eureka Slough Br. (Eureka--Arcata.) under construction	S/O '56 p10+
Completed structure	S/O '56 p9
Ferndale Br. under construction in 1911, then the largest of its type in the world.	M/J '64 p11
George C. Cole Memorial Br. (Eel River at Meyers Flat) under construction.	J/F '62 p5
Completed structure	J/F '63 p29
George M. Leatherwood Memorial Br (S. Fork Eel River; Dyerville)	M/J '58 p40
Completed new span	N/D '59 p25, 33; J/F '60 p36, 43;
Hoopla Rvr. Br. small truss before being washed away by flood waters.	S/O '57 p59
Temporary low-level bridge downstream from bridge site.	S/O '57 p59
Replacement bridge.	S/O '57 p60
Klamath River Br at Klamath, damaged by 1964 flood.	N/D '65 p57
Repair work underway	N/D '65 p57
Bridge shortly before reopening.	N/D '65 p58
Klamath Rvr. Br. at Martins Ferry, built as a flood repair project.	N/D '61 p41
Klamath River Br. at Weitchpec.	M/A '49 p37
Mad River N. Fork, Rt. 299; logging truck crossing suspension bridge.	M/J '47 p27
Martins Ferry Br. between US 101 and Klamath Rvr. towns, destroyed by flood.	J/F '65 p16
Narrow, posted bridge on Rt. 299 [Arcata-Redding Hwy.].	Jan '39 p4
Narrow one-way suspension bridge on Rt. 299 [Arcata-Redding Hwy.].	Jan '39 p4
<b>North Scotia Br. at Rio Dell</b>	
Old and new spans	Apr '41 p4
Crowd at dedication of new span.	Apr '41 p2
Partially destroyed by 1964 floods.	S/O '65 i.cvr
Restoration in progress.	S/O '65 i.cvr
<b>Orleans Bridge (Klamath River, Rt. 96)</b>	
Completed structure	Jun '41 C, p2+; J/F '63 p28
Dedication ceremony for AISC prize-winning bridge	N '41 p22
State Bridge Engineer F.W. Panhorst accepting AISC award	N '41 p22
Former Orleans span	Jun '41 p36
Destroyed by flood.	J/F '65 p16
Robinson Ferry Br. across Eel River; Old span, posted for load limit.	Apr '41 p3
Slyvandale Br across South Fork Eel River.	M/A '66 p19
S. Fork Eel River bridge at Smith's Point, built 1934.	S/O '50 p129
S. Scotia Br. under construction, 1916.	J/A '64 p28
S. Scotia parallel bridge over Eel River	M/A '61 p24+
Original S. Scotia Br under construction, 1916.	J/A '64 p28
Valley Creek bridge, US 101 (Redwood Hwy.).	Jan '39 p5
Willow Creek Br.	N/D '66 p27
Yager Creek timber truss bridge	Mar '37 p8
Yager Creek Br. with broken post.	Mar '38 p5

## BRIDGES, Continued

### Imperial Co.

Bridge near shore of Salton Sea.	M/J '52 p12
<b>Colorado River Br.</b> (I-8) [US 80]	
Old Yuma Br. and railroad bridge.	M/A '56 p34
Under construction.	M/A '56 p35
Arizona governor and Frank Durkee at dedication ceremony.	J/A '56 p55
Highway approach from old bridge to new span.	M/A '56 p35
Approach bridge to new Yuma structure.	M/A '56 p35
Completed bridge	J/A '56 p55; N/D '58 p35
I-40; 7-span bridge under construction, California--Arizona.	N/D '65 p11
New River Br. on Rt. 86 [US 99], ribbon cutting ceremony.	S/O '53 p47

### Kern Co.

Caliente Creek Br. on Rt. 46 [US 466] east of Bakersfield.	M/A '61 p36
Garces Circle Br., Bakersfield	M/A '57 p58
Granite Canyon Br., Rt. 155 [Rt. 142], scour damage to.	J/A '45 p18
Kern Ave. Ped. Overcrossing on US 99 at McFarland.	N/D '60 p63
Poso Creek Br. (Rt. 65).	Jan '42 p24
Poso Creek Br. with salvaged railroad-rail railing.	J/A '44 p10
Poso Creek Br., Rt. 99, scour damage to.	J/A '45 p19
Red Rock Canyon main wash bridge under construction.	M/A '60 p47+
Tehachapi Creek Br. under construction.	N/D '48 p41
Tehachapi Creek plate girder bridge under construction.	J/F '63 p23

**Kings Co.;** Kings River twin bridges on Rt. 198 near Lemoore NAS

J/A '63 p46

**Lake Co.;** Kelsey Cr., existing posted span, piers for new bridge.

J/F '47 p22;

### Los Angeles Co.

Aliso Street Br. under construction.	F '41 p13+
Completed bridge showing connections with other freeways.	S/O '44 p19
Completed Aliso St. separation project.	J/A '48 p14
Arroyo Seco Br. (Pasadena), ribbon-cutting ceremony.	N/D '53 p48
Arroyo Seco Channel Pedestrian Br. [first prestressed of type in state]	
Under construction.	M/A '51 p1+
Completed bridge.	S/O '51 p50
Arroyo Seco flood control channel, prestressed carrying beams.	J/A '64 p7+
<b>Arroyo Seco Pkwy. (Rt. 110)</b>	
Aerial view of Arroyo Seco Pkwy. showing 5 of 26 bridge structures.	Jan '41 p6
Arroyo Dr. Br. over freeway in S. Pasadena.	N '40 p14
Artist's drawing of typical planned bridges.	D '37 p10+
Ave. 40 Br. over freeway and channel.	N '40 p14
Ave. 43 Br. over freeway and channel.	N '40 p14
Ave. 52 Br. over freeway and Arroyo Seco Channel.	N '40 p15
Elysian Park extension viaduct and bridge for southbound traffic only.	J/F '44 p2
Grand Ave. bridge, completed.	Jun '39 p13; N '40 p14
Hermon Ave. Br. over freeway.	N '40 p15
Los Angeles River Br. under construction.	N/D '43 p4
Los Angeles River Br. for northbound traffic.	J/F '44 p2
Arroyo Seco Pkwy. bridges crossing Los Angeles Rvr.	J/F '55 p16
Marmion Way Br. crossing over freeway and channel.	N '40 p15
Orange Grove Ave. under construction.	Jun '39 p11
Big Tujunga Wash, concrete bridge over the south overflow channel.	F '38 p10
Jacking superstructure back to grade, Big Tujunga Wash.	J/A '45 p18
Sacked concrete riprap under construction, Big Tujunga Wash.	J/A '45 p18
Cahuenga Blvd underpass under construction. (US 101)	M/A '52 p4

## BRIDGES Los Angeles Co., Continued

### Colorado Fwy. Br. ["Pasadena Pioneers Br."]

Old Colorado Br. and future site of new bridge. J/F '51 p22  
Retouched photo of bridge models, showing relation of existing and proposed spans. J/F '51 p23  
Models of proposed and existing Colorado St. bridges. J/F '51 p25+  
Engineer George T. McCoy at ground-breaking ceremony. M/J '51 p5  
Engineer F.W. Panhorst at ground-breaking. M/J '51 p5  
Scene at ground-breaking. M/J '51 p6  
Harrison R. Baker (CHC) and child at ground-breaking. M/J '51 p6  
Harrison Baker operating shovel at ground-breaking. M/J '51 p44  
Observation post for "sidewalk superintendents" at bridge site. M/J '52 p18  
Interior of observation building showing model of bridges. M/J '52 p20  
Under construction M/A '52 p14; M/J '52 p18+; M/A '53 p16  
Old and new spans over Arroyo Seco at Colorado Blvd. J/F '55 p16

### Cypress Ave. Pedestrian Overcrossing.

S/O '61 p13

### Devil's Gate Dam Br.(Arroyo Seco, I-210, Foothill Fwy.)

Sketch of proposed span J/A '54 p49  
Existing Arroyo Seco Br. at Devil's Gate Dam. J/A '54 p51  
Completed Devil's Gate bridge across Arroyo Seco M/J '55 p40

### Elysian Viaduct (I-5/Rt. 110).

J/F '61 p22+; J/F '64 p30

Erection of structural steel at crossing of Los Angeles Rvr. S/O '61 p11  
Erection of steel at crossing of SP railroad yard. S/O '61 p11  
Curved steel girders supported by prestressed carrying girder over Arroyo Seco Channel. S/O '61 p13  
Curved On-ramp to Elysian Viaduct. S/O '61 p14

### FAS Bridges

Bridge over Santa Clara Rvr. and SP tracks on Soledad Cyn Rd. J/A '52 p2  
Bridge over Santa Fe Dam outlet works on Arrow Hwy. J/A '52 p2  
Bridge on San Gabriel Co. Rd. J/A '52 p6  
Bridge over N. Fork of San Gabriel Rvr. J/A '52 p6  
Bridge over San Gabriel Rvr on Florence Ave. J/A '52 p7  
Highway bridge over N. Fork of San Gabriel Rvr. on Valley Blvd. J/A '52 p7  
Old bridge over San Gabriel Rvr. on Center St.; new bridge being built. J/A '52 p7

### Figueroa St. Viaduct

Under construction. Apr '37 p14+  
Constructing underpass for Figueroa St. while traffic proceeds on Temple St. N '39 p14  
Permanent ramps built before excavation began permit traffic to proceed during construction of underpass. N '39 p15

Figueroa St. undercrossing near Four-level structure. J/F '49 p62

### Florence Ave bridge across Los Angeles River.

M/J '49 p34

### I-5; Golden State Fwy.

Allen Ave. Undercrossing under construction in Glendale. S/O '57 p22  
Bridge over northbound ramp connection from San Fernando Rd. J/A '54 p55  
Bridge to carry freeway over Los Angeles Rvr. and Riverside Dr. S/O '57 p23+  
Completed bridges near Alameda Ave., Burbank. S/O '57 p21  
Humboldt St. Underpass, six utilities emerging from abutment of. S/O '61 p13  
Owens Valley-Los Angeles open channel aqueduct, reinforced concrete bridge being built across. J/F '54 p40  
San Fernando Rd. and mainline SP RR track bridges J/A '54 p54  
Weldon Canyon Overhead under construction. J/A '54 p55  
Western Ave Undercrossing under construction in Glendale. S/O '57 p22

# **BRIDGES Los Angeles Co., Continued**

I-5; Santa Ana Fwy.	
Daniels Railroad Spur Underpass under construction	M/A '53 p61
Los Angeles River Br. near I-5/I-10 Interchange being widened.	S/O '55 p5+
Rio Hondo Br. under construction.	J/F '53 p21+
<b>I-10; San Bernadino Fwy. [Ramona Fwy.]</b>	
Almansor Ave. Overhead, Alhambra under construction	M/A '53 p49+
Atlantic Blvd. Br. (Rt. 7) [Rt. 167].	J/A '53 p15
Barranca Street Br. under construction (W. Covina).	
Bess Ave.-Frazier Street Br. under construction (Baldwin Park).	M/J '57 p25
Big Dalton Wash pretressing operations.	J/A '56 p46
City Terrace curving on-ramp bridge.	S/O '51 p15
View from under curving City Terrace Dr. bridge.	S/O '51 p16
Cornwell Street Br.	S/O '51 p13
El Monte structure. under construction.	J/A '56 p48
Erecting precast superstructure at Bess Ave.	J/A '56 p46
Evergreen Ave. pedestrian overcrossing section being swung into place by three truck cranes.	N/D '52 p39
Herbert Ave. overcrossing.	S/O '51 p13
Los Angeles River Br., widening operations.	J/F '55 p24
Sunset-Irwindale Undercrossing under construction.	J/A '56 p46
Warwick Ave. pedestrian overcrossing under construction.	J/F '52 p19
<b>I-110; Harbor Fwy.</b>	
Excavation for east abutment of 6th St. overcrossing.	M/A '51 p24
6th St. Underpass, structural details.	M/J '54 p11+
Figuerroa St. bridge at 23rd St., nearly completed	J/A '54 p48
Pedestrian overcrossing under construction near 21st St.	J/A '54 p47
Ramp bridge for southbound traffic from 5th St.	M/J '54 p12
Washington Blvd. underpass, nearly completed.	J/A '54 p47
Wilshire Blvd. and 7th St. overcrossings.	M/J '54 p15
<b>I-405; San Diego Fwy. [Sepulveda Fwy.]</b>	
Dominguez Channel crossing at Wilmington Ave.	J/F '62 p58
Mulholland Drive Br. spanning future San Diego Fwy.	M/J '60 p6
Completed Mulholland Drive Br.	J/F '62 p49
Sunset Blvd overcrossing, Gov. Knight prepares to break ground.	S/O '54 p20
I-605 (San Gabriel River Fwy.), San Gabriel River Br. being raised.	M/J '62 p59
<b>I-710; Long Beach Fwy.</b>	
Belhart Street Br. across Los Angeles River.	M/J '51 p16
Belter St. Overcrossing.	S/O '58 p52
Compton Creek Br.	J/A '53 p12
Del Amo Blvd. Br.	J/A '53 p18
9th St. Br. under construction.	S/O '58 p54
Malibu Creek Br., widening operations (Rt. 1, Coast Hwy.).	M/A '49 p33
Ocean Ave. Br. showing steel girders installed on new caps.	S/O '44 p15
Orange Grove Ave. Br. in Pasadena opened to traffic Dec. 22, 1952.	J/F '53 p53
Pilgrimage Play Br. and subway underpass to Cahuenga Ave. (US 101)	Jul '40 p3
Rio Hondo River timber truss bridge (Rt. 60) [Rt. 172] near Montebello oil fields.	D '38 p2
Damage/repair of chords on trusses of Rio Hondo Br.	N/D '45 p13
<b>Rt. 60, Santa Monica Fwy.; Los Angeles River Br.</b>	
CHC members at ground-breaking.	J/A '57 p23
Start of excavation work for center pier in the L.A. Rvr. channel.	J/A '57 p24
Under construction	J/A '59 p39+
Lower deck slab poured.	S/O '59 p19

**BRIDGES Los Angeles Co., Continued**

San Gabriel River Br., splice repair to damaged truss on. N/D '45 p33  
 Tightening trusses in San Gabriel Rvr. w. fork bridge N/D '45 p13  
 Santa Clara Br. and overhead. M/A '49 p12  
**Santa Monica Fwy. Viaduct (Rt. 10)**  
 Viaduct under construction at connection with Harbor Fwy. (I-110) J/F '61 p16  
 Tubular steel falsework for construction of viaduct. J/F '61 p19  
 Cast-in-hole pile construction for Santa Monica Fwy. viaduct. J/F '61 p24  
 Completed section of Santa Monica Fwy viaduct, part of "loop bypass." N/D '61 p5  
 Terminal Island Fwy., lower lever bascule bridge. M/A '52 p15  
 Schuyler F. Heim lift span bridge. M/A '52 p15

**Vincent Thomas Br. [San Pedro--Terminal Island Br.]**

Drawings of proposed bridge. M/J '59 p39; J/A '60 p21  
 Gov. Edmund G. Brown and official party at ground-breaking ceremony. J/A '60 p20  
 Site of future bridge showing locations of precise control survey stations. S/O '60 p57  
 Under construction. N/D '62 p13; M/A '63 p20  
 Aerial view of bridge with partially strung suspension cables. N/D '62 p60  
 Cable spinning operations J/F '63 p9+  
 Toll plaza on Terminal Island. M/A '64 p27  
 Completed structure J/F '65 p41; M/J '66 p14

**Madera Co.**

Cottonwood Creek Br. on Rt. 145 [Rt. 126]. Jun '41 p5  
 Lanes Bridge across San Joaquin River on Rt. 41. N '41 p16  
 Concrete bridge over San Joaquin overflow connected with Lanes Br. by fill. N '41 p17  
 Ribbon cutting ceremony at Lanes Br. dedication. N '41 p18

**Marin Co.**

Corte Madera Creek Br. under construction on US 101. M/A '59 p3  
 Golden Gate Br.--See *San Francisco Co.*  
 Petaluma Creek Br. under construction (Rt. 37). M/A '58 p25+  
 Completed bridge. M/A '59 p7  
 Vertical clearance improvement on Petaluma Creek Br. M/J '45 p8

**Richardson Bay Br. (US 101)**

Gov. Knight inspecting site of new bridge across Richardson Bay, N/D '54 p21  
 obsolete 4-lane structure in background. M/A '55 p14  
 Foundations for new bridge under construction. M/A '56 p16;  
 Bridge under construction. S/O '56 p31  
 New Richardson Bay Br. on left and existing span on right. M/A '59 p5  
 Pedestrian overcrossing near Richardson Bay Br. on US 101. M/A '59 p10  
 Side view of Richardson Bay Br. M/A '59 p10

**Richmond-San Rafael Br.--See *Contra Costa Co.***

Rock Creek Br., original timber truss, double arch span under construction, 1916. J/A '64 p28

**San Rafael Viaduct (US 101)**

Viaduct under construction at junction with existing highway. D '40 p11  
 Location of proposed viaduct in relation to existing buildings in San Rafael. Jul '40 p7  
 Nearly completed highway viaduct through San Rafael. Jul '41 p20  
 Official party at San Rafael Viaduct dedication. N '41 p14  
 Northern approach to viaduct; Deck of viaduct. Jan '42 p5  
 Viaduct on US 101 in southern part of county, dated 1923. S/O '64 p16  
 War surplus bridge across Laguntias Cr. in Samuel P. Taylor Park. N/D '47 p11

**Mariposa Co.; Bear Creek Br. (Rt. 140)**

M/A '46 p24

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES, Continued**

**Mendocino Co.**

Albion River Br., built for \$350,000.	J/A '44 p4
Crowd at dedication.	J/A '44 p5
County pioneer Mrs. Marian A. Haarby and official party at ribbon cutting.	J/A '44 p6
Original Albion River Br., built in 1922	S/O '50 p122
Alder Creek Br. and approaches (Rt. 1).	J/F '47 p20
Blue Slide replacement bridge, Rt. 1	J/F '47 p22
Bridge on Rt. 1 constructed ca. 1880s.	M/J '52 p12
Bridges Creek Br.	
Old Queen's Post wooden truss bridge.	Mar '39 p23
New deck under construction using "skidding" operation	Mar '39 p23
Caspar Creek Br.; old timber trestle and concrete replacement bridge.	N/D '66 p27
Dangerous structure with narrow roadway near Hopeland.	Mar '37 p9
Dolan Creek timber arch bridge on Rt. 1.	M/J '52 p16
Elk Creek Br., the cause of several severe accidents.	Mar '37 p9
Elk Cr.; old timber bridge replaced by concrete girder bridge on new alignment.	S '39 p2
Garcia River Br. with timber trusses and approaches replaced by steel truss span.	S '39 p2

**Gualala River Br., Rt. 1**

Reinforced concrete box girder bridge.	M/A '59 p18
Cable ferry crossing Gualala Rvr. ca. 1890-1894.	M/A '59 p19
Original bridge near Gualala, 1894	M/A '59 p19
Same bridge shaken from one of its piers by 1906 earthquake.	M/A '59 p19
Gualala Br. No. 2.	M/A '59 p19
Hare Creek Br.; detail of plaque dedicating span to Emil H. Evenson.	N/D '48 p33
Jack Peters Cr.; timber truss bridge replaced by modern concrete box girder span.	S '39 p2
Jughandle Cr.; old timber truss bridge replaced by concrete arch. (Rt. 1).	S '39 p2
Jughandle Cr. concrete arch bridge.	M/J '52 p14
Navarro River Br., old span, with new bridge in background.	M/J '49 p32
Close up of new structure.	M/J '49 p32
Noyo Creek Br., Ft. Bragg., old bridge.	N/D '48 p32
Plaque dedicating bridge to war veteran Charles Larson.	N/D '48 p33
Outlet Creek; four-lane structure, and NW Pacific RR north of Willits (US 101).	J/A '58 p40
Rock Creek Br. under construction	M/A '49 p52
Russian Gulch Arch, built in 1940.	S/O '50 p129
Schooner Gulch Br.	Aug '41 p23
Slick Rock Br., culvert and fill replacement of (Rt. 1).	J/F '47 35
Russian Gulch Br. with arch span (Rt. 1).	Jul '40 p21; D '40 p19
Rock Creek; trestle detour built in record time.	Jul '37 p16
Russian Gulch Bridge.	S/O '50 p148; J/F '53 p58
Ten Mile River Br. north of Ft. Bragg.	N/D '54 p22
Official party at dedication.	N/D '54 p23

**Merced Co.**

Bear Cr.; old bridge and detour (Rt. 140) [Gustine--Merced Hwy.]	M/J '54 p49
Gustine Canal Br. showing bank lining.	M/J '54 p47
Rt. 33 south of Gustine: new bridge with improved alignment.	M/J '54 p47
San Joaquin River Br., Merced Co. collapsed due to overload	Mar '38 p4
San Luis Forebay channel twin bridges.	J/A '65 p5
Twin bridges on 4-lane divided hwy. near Merced.	N/D '47p22
Modoc Co.; Ash Creek Br., deterioration on (Rt. 299).	M/A '46 p23

## BRIDGES, Continued

### Monterey Co.

Big Creek Br. (Rt. 1) [Carmel-San Simeon Hwy.].  
 Under construction. Jul '38 p24+; May '39 p8+  
 Collapsed falsework of one arch on partially completed span due to flood. Apr '38 p10  
 Bixby Creek Arch Br. (Rt. 1) O '37 p4; J/A '60 p55  
 Burns Creek Br. Jul '37 p5  
 Cold Creek Br. on Rt. 20 near Ukiah before safety-related improvement. J/A '65 p32;  
 After replacement of concrete railing with continuous metal beam strip. J/A '65 p32;  
 Dolan Creek Br. Jul '37 p5  
 Dry Creek Br.; old, narrow bridge; and new Dry Creek Br. O '38 p15  
 Fairgrounds Road Overcrossing bridge. N/D '66 p24  
 Hot Springs Creek Br. on Rt. 1 in Big Sur area. M/J '64 p52+; M/A '66 p7  
 King City Br. (Salinas River)  
 Pier and superstructure design. J/F '57 p27  
 Close up of King City Br. J/F '57 p28  
 Traffic using newly opened span. J/F '57 p28  
 Lime Creek Br. Jul '37 p5  
 Salinas River Br. on U.S. 101 near Soledad.  
 Original narrow bridge O '38 p1; D '39 p9  
 New Salinas River Br. N '38 p23  
 Parallel bridges at Soledad under construction. M/A '61 p53  
 Salinas, US 101  
 Market St. Crossing under construction J/A '53 p39;  
 N. Main St. Overpass construction; J/A '53 p39;  
 Sherwood Dr. Overcrossing. J/A '53 p39  
 Torre Creek Br. Jul '37 p5  
 Vicente Creek Br. (Rt. 1.) before/after reinforced concrete footings N/D '45 p13  
 Vicente Creek Br. on Rt. 1, winner of PCI award of merit. J/A '65 i.cvr.  
 Willow Creek Br. under construction directly behind old span (Rt. 1). M/A '63 p53  
 Completed bridge J/A '64 p8

### Napa Co.

Chain link fence along Old Sonoma Rd. Overcrossing of Rt. 29. M/J '61 p19  
 Maxwell Br. across Napa River. N/D '49 p19  
 Welding studs into deck grid of Maxwell Br. to create nonskid surface. M/J '65 p48+  
 Silverado Trail bridge, before/after views of realignment. N/D '59 p27

### Nevada Co.

Concrete arch bridge on old US 40, built in the 1920s. M/A '66 p8  
 Donner Creek Br. I-80 [Rt. 38], deterioration on rail. M/A '46 p23  
 Donner Summit Br. and new lookout station for tourists (I-80). O '37 p3  
 Narrow bridge and sharp curve on county highway. Aug '38 p2  
 Polaris Br. across Truckee Rvr. I-80 [US 40]. M/A '46 p20  
 Polaris Br. with curb and rail damage M/A '46 p21  
 Truckee River Br. on I-80 [US 40] northeast of Truckee. N/D '60 p63

### Orange Co.

Artesia Street Br. over Los Angeles River. J/A '53 p14  
 Artesia Street Br. over Long Beach Fwy. (I-710) J/A '53 p12  
 Euclid Ave. Br. under construction in Anaheim. (I-5, Santa Ana Fwy.) J/F '57 p7  
 Olive Undercrossing., start of construction. J/A '55 p52  
 San Gabriel River Br., start of construction on. N/D '52 p20  
 Santa Ana River Br. on Rt. 91 [Rt. 175]. J/A '55 p52



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES, Continued**

**Placer Co.**

Blind vertical curve to narrow bridge on Placer Co. highway.	Aug '38 p3
Narrow, obsolete type subway near Roseville on Rt. 65 [US 99E]	Aug '38 p3
<b>North Fork American River Br.</b>	
Original structure built 1865	J/F '53 p18
Wire cable bridge at same location, 1928.	M/A '48 p37
Suspension bridge which replaced it in 1929	M/J '44 12; J/F '53 p18
Cable bridge at same location ca. 1930.	M/A '48 p13
Replacing bridge tower	M/J '44 p13
Third structure under construction, 1948.	J/F '53 p18
Completed bridge, opened Feb. 14, 1948.	M/A '48 p13
N. Fork American Rvr. near Foresthill, new FAS bridge	N/D '55 p20+
Steel truss bridge which served the Foresthill area between 1911-1955.	N/D '55 p20
Obsolete one-way suspension bridge on Rt. 49.	Aug '38 p1
Steep approach on curve to railroad grade crossing.	Aug '38 p2
Steel and reinforced concrete bridge under construction (I-80) [US 40].	May '39 p19

**Plumas Co.**

Bridge near Blairsden, can be knocked down if hit by truck.	Mar '37 p9
Indian Creek Br. near Keddie which received award for its appearance.	N/D '55 p19
Pulga steel arch bridge on Rt. 70, railroad bridge far below.	J/A '45 p7
Quincy; timber bridge with new concrete bearing clocks on truss members (Rt. 70).	M/J '44 p15
Tobin; highway bridge underneath Western Pacific bridge (Rt. 70).	Aug '37 p5
Wolf Creek; highway bridge on Rt. 89 [Rt. 83] near Greenville.	Mar '39 p15

**Riverside Co.**

Colorado River Br near Blythe carrying I-10 [US 60-70].	M/J '59 p5
Crestmore Br. across Santa Ana Rvr. at Riverside.	J/A '58 p33
Channel constructed for Santa Ana Rvr., and Crestmore Br. at Riverside.	J/A '58 p34
Horsechief Creek Br. replaces old bridge damaged in 1938 flood.	O '41 p13
San Geronio Wash Br., sacked concrete riprap being placed at ends of.	May '41 p12
Smoky Gulch bridge nearly completed and ready for guard rail installation.	J/A '50 p26
Stiffeners used in original design may be reduced in later application.	J/A '50 p27
Special sections constructed for Smoky Gulch Br.	J/A '50 p27
Whitewater River bridges between Garnet and Thousand Palms on Rt. 86 [US 99].	J/A '54 p57

**Sacramento Co.**

American River Br. at Sacramento under construction, interesting texture on piers.	N/D '66 p25
Bear Slough; existing bridge and construction on new bridge adjacent.	M/A '47 p7
Cosumnes River FAS-funded bridge near Sloughhouse.	N/D '64 p55
Superstructure under construction at Dillard Rd.	M/A '65 p77
Elvas Br. across American River.	N/D '54 p19
Fort Sutter viaduct under construction (29th-30th Streets).	N/D '64 p52
Underside of Ft Sutter Viaduct.	N/D '66 p24
Retaining wall with exposed aggregate panels.	N/D '66 p25
Georgiana Slough Br. at Walnut Creek over arm of Sacramento Rvr.	J/F '64 p28
I Street Br., Sacramento, official group at ribbon-cutting ceremony.	O '37 p17
I Street span & new approach, and Jibboom St. Viaduct.	O '37 p17
Laguna Creek Br. just north of Elk Grove.	M/A '47 p6
<b>North Sacramento Viaduct (Del Paso Blvd.) [US 40]</b>	
Equipment tearing up old pavement, and grading for south approach.	D '41 p14
Reinforcing steel columns mark route of viaduct across railroad tracks.	D '41 p14
Frank W. Clark breaks ground for viaduct.	Aug '41 p9
Section of Del Paso Blvd. flooded by overflow waters of American River.	F '41 p21
Full width view of completed roadway of North Sacramento viaduct.	O '42 p4



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES Sacramento, Continued**

East bound traffic using structure immediately after dedication.	O '42 p4
North Sacramento Viaduct; Old wooden trestle which viaduct replaced.	J/F '48 p2
<b>Pioneer Memorial Br (W-X Street), I-80</b>	
At early construction stage, Yolo Co. side.	S/O '64 p27+
Nearly completed substructure of bridge on Yolo Co. side.	S/O '64 p30
Pier construction.	S/O '64 p30+
Under construction, general	N/D '65 p16; M/J '66 p45
Pioneer Memorial Br approach ramps, W. Sacramento., the most extreme example of curved steel girders on a major structure built to date.	N/D '66 p25
Completed Pioneer Memorial Br.	N/D '66 p27
Rio Vista Br. under construction across the American Rvr.	J/A '59 p5
Sacramento-Yolo swing bridge (Sacramento River) ca. 1858.	S/O '50 p117
Three Mile Slough Br. with lift raised, old bridge in background.	S/O '49 p26
Bridge under construction	S/O '49 p26
Tower Br. (M St./Capitol Ave.) over Sacramento River, Sacramento.	J/F '64 p31
Watt Ave. Br. across American Rvr. under construction.	S/O '61 p25+
Roadway of completed bridge.	S/O '61 p28
<b>San Benito Co.</b>	
Pajaro River; existing narrow bridge, new bridge under construction.	Aug '41 p19
San Benito River Br. near Hollister with tower damaged by truck.	Mar '38 p5
San Benito River Br. with steel pratt trusses at Hollister, 1912.	S/O '50 p121
<b>San Bernardino Co.</b>	
Base Line Ave.; narrow bridge between San Bernardino and Redlands.	Jan '39 p1
Cima Rd. Overcrossing, part of Baker Grade project (I-15).	S/O '61 p2
City Creek Br. at East 5th St., San Bernardino.	J/F '49 p31
City Cr. concrete arch bridge on City Creek Rd. near San Bernardino.	M/A '48 p22
I-40 [US 66], Needles; bridge under construction.	J/F '58 p57
Kaiser spur overpass. (I-10, San Bernardino Fwy.).	J/A '48 p7
Mojave River Br. and Overhear at Victorville Narrows on Rt. 18.	M/A '63 p50
Old span now serving as haul road for ore trucks.	M/A '63 p50
Monte Vista Ave. freeway structure.	N/D '54 p12
Narrow bridge connecting Cajon Pass with San Bernardino Mt. resorts.	Jan '39 p7
Red Rock Br. (Colorado River, I-40) [US 66]	
Last train crossing bridge 3/8/45 after new Santa Fe Br. was completed.	J/A '47 p21
Red Rock Cantilever Br. nearing completion in 1890.	
California portal of Red Rock Br.	J/A '47 p22
Old Trails Arch (Bridge 54-18).	J/A '47 p22
Santa Ana River Br. at Waterman Ave., San Bernardino.	J/F '49 p31
Santa Ana River Br. near Prado Dam outlet under construction.	J/A '50 p52
Sixth St. overcrossing, Campus Ave. Br. in Ontario.	N/D '54 p10
Victorville Overhead. (I-15).	S/O '58 p48
Warm Creek Br. (I-10, Colton).	Aug '37 p15
<b>San Diego Co.</b>	
Agua Hedionda bridges and fill.	M/J '53 p12
Buena Vista fill and structures.	M/J '53 p3
Cabrillo Br. in Balboa Park, which will span Cabrillo Fwy. (Rt. 163).	M/A '46 p7
Coronado Br.	
Recommended bridge line (4th St. Coronado--Crosby St., San Diego).	S/O '62 p58
Architectural drawing of proposed Coronado span.	S/O '62 p58
Cottonwood Creek Br., dangerous because roadway is too narrow.	Mar '37 p9

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES San Diego Co., Continued**

Devils Canyon bridges.	J/F '64 p45
Devil's Gate Br. under construction.	M/J '63 i.cvr
Devils Canyon Br. No. 1. J/F '64 p46	
Steel girder being moved into place on Devil's Canyon Br. No. 2.	J/F '64 p47
Devil's Canyon Br., winner of AISC award for beauty, 1963-64.	J/F '65 p40
I-5 [US 101]; twin viaducts north of four-level interchange.	S/O '65 p12
I-5; Oceanside-Carlsbad Fwy. [US 101]	
One of many overhead structures on freeway.	M/J '54 p31
Pier construction for 8th St. Overcrossing in Oceanside.	N/D '51 p33
Loma Alta Creek bridges and fill.	M/J '53 p12
Los Penasquitos Creek Br. on I-15 [U.S. 395].	N/D '50 p17
Penasquitos Creek Br. under construction next to existing bridge.	M/A '65 p64+
Los Penasquitos Creek Br.	N/D '66 p26
MacKinnon Ave Overcrossing on I-5 north of San Diego.	J/A '65 i.cvr+
Rt. 67 [Rt. 198]; dangerous alignment and inadequate bridge.	F '38 p15
San Diego River bridges under construction (I-15). J/A '60 p29	
San Felipe Creek Br. (Rt. 67) damaged by truck	N/D '45 p33
San Luis Rey River Br., built in 1929 (Oceanside).	S/O '50 p125
San Luis Rey River Br., widening operations.	N/D '51 p31
Roadway of existing San Luis Rey River Br. before widening.	N/D '51 p31
Santa Margarita River Br., looking south.	F '38 p7
Santa Margarita River Br., railroad bridge in background.	O '37 p6
San Mateo Cr., construction scene at site of new bridge.	M/J '46 p24
Existing and new bridges over San Mateo Creek.	M/J '47 p31
Sweetwater River channel bridge, I-5 [Montgomery Fwy.].	J/F '51 p35
Sweetwater River Br. under construction east of Alpine.	S/O '51 p38

**San Francisco Co.**

**Golden Gate Br.**

Aerial view of world's largest suspension span showing Waldo approach on Marin side, winding from northern bridgehead over mountains and through tunnel leading down to Waldo Point.	May '37 p3
Sweep of bridge from S.F. side, Ft. Mason under arch span in foreground.	May '37 p3
Huge redwood logs forming barrier across Waldo Approach were sawed apart by champion saw welders at close of dedication ceremony.	Jun '37 p13
I-280 [Southern Fwy., Rt. 82]	
Theresa St. Pedestrian Overcrossing under construction.	M/J '64 p38

**San Francisco Bay Crossings, General**

Second/parallel Bay Br., borings being taken for.	J/F '47 p8
Engineers selected to design and build.	M/J '48 p18
Parallel Bridge Plan model, showing San Francisco approaches.	N/D '48 p5
Model of San Francisco approaches for a second bay crossing.	N/D '48 p6
Model of East Bay connections to Bay Br. and Parallel Bridge.	N/D '48 p7
"Southern Crossing"	
Southern Crossing model, showing 3rd and Army Streets rotary.	N/D '48 p4
Gov. Knight conferring with engineer-consultants on Southern Crossing.	J/A '54 p45
Projects Engineer Norman C. Raab briefing press on Southern Crossing.	J/F '55 p34
Southern Crossing consultants with Frank Durkee and Norman Raab.	M/A '55 p57
Southern Crossing experts Norman C. Raab, C. Cheever Hardwick, and George W. Burpee.	N/D '56 p38
Representatives of the Dept. of Public Works at press briefing.	N/D '56 p38

# **BRIDGES San Francisco Co., Continued**

## **San Francisco-Oakland Bay Br.**

Award from ASCE naming bridge one of "7 Civil Engineering Wonders of the U.S." M/A '58 p23:

### **Bonds**

Cartoon of CTBA, 1932 from S.F. Chronicle, regarding Bay Br. bonds. J/A '52 p43  
 Frank W. Clark at duplicating machine signing Bay Br. bonds. F '40 p11  
 CTBA after signing documents authorizing bond sale refinancing. M/J '44 p2

### **Dedication, November 1936**

Bridge day before opening, Nov. 12, 1936. S/O '50 p83  
 Gov. Merriam using blow torch to sever chain, signaling opening of bridge to traffic. N/D '56 p55

### **Construction, 1930s**

Expert divers used in laying foundation for bridge caissons. N/D '56 p55  
 View from east portal of cantilever section of Bay Br. N/D '56 p58  
 Night view during spinning of gigantic cables for the suspension section. N/D '56 p59  
 Bridge just after opening to traffic. N/D '56 p55

### **Emergency Service**

Tow cars and fire trucks used to provide services for stalled motorists on bridge Aug '38 p24; J/F '46 p22  
 Emergency crew responding to upholstery fire on span. J/F '46 p21  
 Cradle attachment on tow truck provides quick hook-up for auto towing. J/F '46 p21  
 Four wheel drive heavy tow truck renders tow service to heavily laden truck and trailer on bridge. J/F '46 p22  
 Bay Br. fire crew dousing blaze on span. M/J '45 p20  
 Maintenance boat "Active" throwing stream of water onto bridge during fire drill; Close-up of auxiliary fire pump. M/J '45 p21+  
 Fire crew men using water pumped from truck mounted tanks. M/J '45 p22  
 Fire truck unit operated by Bay Bridge. M/J '45 p23  
 Tow truck operator on radio to dispatcher. J/A '47 p18  
 Tow truck equipped with radio cabinet mounted on running board. J/A '47 p19  
 Dispatch operator manning radio. J/A '47 p26

General views of bridge. Jun '39 p3; M/J '44 p3; M/A '58 p24+; N/D '61 p61

### **Lighting**

Internally lighted directional signs on S.F. side of bridge. M/A '64 p48  
 Lower deck lighting on West Bay span. M/A '64 p51  
 Lower deck lighting on viaduct section of East Bay spans. M/A '64 p51

### **Lower deck reconstruction in progress.**

Completed upper deck strengthening. J/A '60 p38+  
 Control panel of special truck for placing epoxy coal tar material. M/A '64 p50  
 Equipment train for resurfacing upper deck. M/A '64 p52

### **Maintenance**

8-1/2 ton gantry designed for bridge maintenance operations. O '37 p22  
 15-ton wrecking truck used on bridge. M/J '53 p5  
 Power broom used on bridge J/F '52 p37

### **Painting**

"Air analyzer" used to test paint resistance. Apr '38 p23  
 "Bird Cage" or truss web scaffolds mounted outside bridge, used to paint truss members. S/O '61 p53+  
 Special narrow Bird Cage used on curved spans of East Bay section. S/O '61 p55  
 Cleaning bridge surfaces before applying new coat of paint. Apr '40 p18  
 Gentries, or upper deck travelers, on 3-rail overhead track with air-powered drive. S/O '61 p51

## BRIDGES San Francisco Co., Continued

Inspection bridge used in painting floor system.	S/O '61 p50
Lower deck travelers used on East Bay section provide platform for painting lower deck floor system.	S/O '61 p52
"Magic Carpets" suspended from upper chord used to repaint lower deck floor system.	S/O '61 p51
Main cable scaffold.	J/A '61 p7
Main tower scaffold.	J/A '61 p9
Painting crews at work.	Apr '40 p19
Painting finish coat on upper eye bars, E. Bay cantilever structure.	J/A '61 p5
Paining top of lateral bracing in cantilever structure.	J/A '61 p6
Spot-coat painting being applied to tower of E. Bay cantilever section.	J/A '61 p6
Steam-cleaning surface prior to painting.	J/A '61 p10, cvr.
Suspended rope cage	J/A '61 p8
Traveling scaffolding for painting underside of bridge.	J/F '46 p5
Parking facility under bridge, free for 24-hour period to patrons of span.	Jun '37 p25
Port of Oakland overhead section.	D '37 p21

### Railway System

Laying first ties for railway system at easterly edge of span.	D '37 p23
Bridge Engineer C.E. Andrew placing first railway tie in position.	D '37 p23
Drawing on aerial photo of E. Bay electric railway approaches to bridge.	D '37 p21
Control board operating electric routing and switching of bridge trains.	S '38 p24
Mechanical lever system.	S '38 p24
Rear view of control board's complicated wiring system.	S '38 p25
First streamline train crossing bridge, Gov. Merriam at throttle.	O '38 p19
Gov. Merriam shaking hands with railroad workers.	O '38 p19
Where Bay Br. trains will enter and leave the easterly end of span.	May '38 p8
Where trains will leave the westerly end of bridge.	May '38 p9
Elevated track level showing newly erected roof steel.	May '38 p11
View looking down East Bay Crossing showing ties and tracks in place.	May '38 p11
Aerial photo/drawing of bridge and railway terminal.	Jan '39 p16
Lower bridge deck carrying train and truck traffic.	F '39 p7
Section of lower deck with railway tracks removed.	J/A '60 p38

### Toll Related

"Cat's whisker" used to reduce electric shock in autos passing through toll gates.	Apr '37 p21
View looking east toward Bay Bridge Toll Plaza.	N/D '46 p3
Gov. Edmund Brown depositing first quarter in automatic toll machine.	J/A '59 p7
Trucks backed up at toll gates, waiting to be weighed before per-axle policy took effect; Toll gate area after per-axle tolls went into effect.	J/A '60 p62

### Traffic

Bay Br. traffic 1936 and 1946.	N/D '46 p4
Rush our at Bay Br. Toll Plaza.	J/F '67 p24+
Steady stream of traffic (revenue) on bridge.	N/D '47 p1
Upper deck traffic after change to one-way operation.	M/A '64 p50

### Treasure Island-Bay Br. Hwy.--See ROUTES

### Truck lane added to lower roadway

Before: traffic on lower deck roadway blocked by waiting trucks.	J/A '45 p26
After: Army convoy proceeds unhampered by waiting trucks.	J/A '45 p26
Traffic at Toll Plaza during Key System Strike.	M/A '54 p28
Ramp system in S.F. showing traffic being partially diverted to lower (truck) deck due to strike.	M/A '54 p29

### Yerba Buena Island--See ROUTES

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES San Francisco Co., Continued**

US 101; Bayshore Fwy.	
17th St. superstructure under construction.	J/F '53 P3
25th St. pedestrian bridge and 23rd. St. vehicular bridge.	J/F '53 p5
9th and 10th St. Viaduct.	S/O '54 p32; J/F '64 p31

**San Joaquin Co.**

Acampo Rd. overcrossing and Pumping Plant (Rt. 99).	M/J '57 p44
Calaveras River overcrossing on I-5 between Stockton and Lodi.	N/D '64 p50
Delta Mendota Br. under construction on Tracy Expressway.	M/A '53 p 28
Grant Line Canal double bascule span drawbridge.	J/F '60 p55; N/D '60 p63
Original Grant Line Canal Br built in 1906.	J/F '60 p56
Jahant Rd. overcrossing (Rt. 99).	M/J '57 p45
Linden Rd Overcrossing after reconstruction of Rt. 99 to full freeway.	J/F '65 p25
Lockford Road Br., diverting canal bridges, Rt. 99 Stockton.	J/A '49 p32
Mokelumne River Br. near Clements, bad approach to.	Mar '39 p11
Mokelumne River Br. on FAS Rt. 901.	M/J '49 p24+
Mokelumne River steel span drawbridge on Rt. 12 (Lodi--Rio Vista).	S '42 p3
Mokelumne Rvr. twin bridges (Rt. 99).	J/A '58 p18
Mormon Slough twin bridges at diverting canal, Stockton.	M/A '50 p12
Mossdale Br. before and after repair of traffic damage.	M/J '45 p6
New Hope Landing Br. traffic hazard on.	Mar '39 p10
Paradise overflow bridge under construction.	S/O '46 p19
San Joaquin Rvr. Br. at Mossdale, built in 1949.	S/O '50 p129
Stanislaus River Br. on FAS Rt. 903 between Modesto and Escalon.	N/D '59 p26
Stanislaus Rvr. between Salida and Ripon, traffic using 2-lane bridge across.	N/D '47p23
Stockton Bypass Structure on under construction (Rt. 99).	S/O '48 p28

**San Luis Obispo Co.**

Arroyo Grande Creek twin bridges, US 101.	S/O '59 p36
Atascadero; bridge built by SP in 1902.	S/O '50 p123
Atascadero Creek Br. built by county	S/O '50 p128
Buena Vista Crossing at northerly end of San Luis Obispo.	J/A '53 p37
Cuesta Overhead superstructure under construction.	May '38 p7
Leffingwell Creek Br. on Rt. 1 near Cambria. being used in paint study.	J/F '62 p26+
Narrow bridge restricted for speed and load on US 101 south of San Luis Obispo.	O '38 p2
N. Paso Robles Overhead under construction.	J/A '57 p7
Looking northerly from site of S. Paso Robles Overhead.	J/A '57 p7
Old Creek Br. between Cayucos and Morro Beach.	O '38 p2
Pismo Beach; twin structures carrying freeway over SP RR south of town.	J/F '57 p20
Salinas River Br. approaches with sharp reverse curves on poor alignment.	O '38 p3
Salinas River, Paso Robles.	
Present steel pratt truss bridge.	J/A '57 p6
Reinforced concrete box girder bridge under construction.	J/A '57 p34
San Luis Obispo Creek Br. and old, narrow bridge structure.	Aug '41 p12
Santa Rosa St. (Rt. 1) Crossing of San Luis Obispo Bypass, partially constructed.	J/A '53 p37

**San Mateo Co.**

Broadway overcrossing on US 101, Burlingame, looking north.	M/J '49 p2
Butler Rd. overcrossing on US 101, South S.F.	M/J '49 p3
Dumbarton Br.; Frank Durkee signing bonds for purchase of using multiple-signing machine.	S/O '51 p57
Pedestrian overpass in S. San Francisco, showing 120-ft. clear span across US 101.	M/J '49 p1
San Francisco Br. as seen from Alpine Rd.	J/A '51p10
San Mateo Creek on I-280, model of proposed bridge.	M/J '64 p24

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES, San Mateo Co., Continued**

**San Mateo-Hayward Br.**

- |   |                |
|---|----------------|
| Frank Durkee signing bonds for purchase of using multiple-signing machine.                  | S/O '51 p57    |
| flag-raising ceremony.  | S/O '51 p11    |
| truss spans and lift span   | M/J '52 p14    |
| Gov. E. Brown and Lt. Gov. Glenn M. Anderson with sketch of proposed high-level fixed span. | S/O '61 i.cvr. |
| High-level span under construction.   | J/F '63 p25    |
| Model of proposed San Mateo-Hayward Br.   | S/O '64 p65    |

**Santa Barbara Co.**

- |   |  |
|---|--|
| Bridge operations near the groves on US 101 [Rt. 2] near Buelton where every care is being taken to preserve trees and natural scenic beauty. | O '38 p23  |
| Canada del Rufugio bridge under construction.   | O '41 p3   |
| Carpinteria Creek Br. (US 101)  | M/A '55 p43  |
| Castillo St. undercrossing.   | M/A '64 p3   |
| Cold Springs Canyon Br. under construction (Rt. 154)  | M/J '64 p15+                                       |
| Completed structure.  | S/O '64 p59; N/D '64 p54; J/F '65 p40; J/F '67 p37 |
| Dos Pueblos Cr., US 101   |  |
| Old narrow bridge which was replaced by modern structure.   | O '41 p21  |
| Before/after views of old and new bridges.  | Mar '42 p10+                                       |
| Franklin Creek Br. (US 101)   | M/A '55 p43  |
| Gaviota Creek Br. at Gaviota Gorge.   | M/A '51  |
| Huasna River Br. under construction on Rt. 166, Santa Maria.  | M/J '59 p17+                                       |
| Completed bridge.   | N/D '60 p63; J/F '64 p29                           |
| Mission St. railroad bridge and undercrossing.  | M/A '64 p4   |
| Narrow bridge on US 101 carrying heavy truck traffic.   | O '39 p17  |
| Narrow underpass and timber bridge, on section of US 101 north of Guadalupe.  | O '38 p3   |
| Nojoqui Creek Br. conforms perfectly to the width and curvature of roadway.   | Jun '39 p8   |
| Nojoqui Creek bridges, built 1949.  | S/O '50 p129                                       |

**Santa Maria River Br.**

- |   |              |
|---|--------------|
| Santa Maria River, steel truss bridge across old channel of.            | Jan '43 p13  |
| Traffic crossing old bridge   | J/F '63 p7   |
| Twin bridges carrying traffic across Santa Maria Rvr. channel.          | J/F '63 p7   |
| Aerial view of twin bridges under construction.                         | J/F '63 p8   |
| Santa Ynez River Br. near Lompoc, profile view.                         | Jun '39 p23  |
| New approach road to bridge.  | Jun '39 p2   |
| Old 1885 bridge it replaced.  | Jun '39 p23  |
| View of bridge ca. 1900   | S/O '50 p121 |
| Dedication for Santa Ynez River Br., 1917.                              | J/A '65 p31  |
| Sisquoc River Br. near Garey replaced older flood damaged structure.    | N/D '60 p34  |
| View looking westerly across Arroyo Quemado, old narrow bridge at left. | J/F '50 p30  |
| Fill constructed across Arroyo Quemado for new northbound lane.         | J/F '50 p30  |
| View of embankment, existing bridges across Arroyo Hondo.               | J/F '50 p30  |

**Santa Clara Co.**

- |  |             |
|--|-------------|
| Coyote Cr. bridges in foreground.  | J/A '47 p8  |
| Coyote Creek bridges under construction, I-880 [Eastshore Fwy].                          | J/F '53 p8  |
| Magdalena Ave. Undercrossing, Junipero Serra Fwy.(I-280).                                | N/D '66 p27 |
| Marsh Rd. Overcrossing on Bayshore Fwy.(US 101) south of Redwood City.                   | N/D '59 p25 |
| Mora Dr. Overcrossing on Junipero Serra Fwy.(I-280).                                     | N/D '66 p25 |
| Pajaro River Br. (US 101).   | Jan '42 p15 |
| Raised division strip on deck of new bridge contrasting with narrow roadway of old span. | Jan '42 p15 |

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES, Santa Clara Co., Continued**

**Sidehill viaduct on Rt. 17 (Los Gatos-Santa Cruz Hwy.)**

Driving steel "H" piles with crane driver and forming piles of bent caps before pouring reinforced concrete caps on sidehill viaduct project.	May '40 p10
Forming of concrete caps on steel "H" piles.	May '40 p11
Difficult widening job due to close proximity to railroad track.	May '40 p11
Viaduct pile driving operations.	May '40 p12
Completed structure.	S '40 p9

**Santa Cruz Co.**

Pajaro River Br at Watsonville, 1915	S/O '50 p121
San Lorenzo Br on Bear Creek Rd. near Boulder Creek, old span.	J/A '54 p44
New San Lorenzo River Br constructed under FAS Program.	J/A '54 p44

**Shasta Co.**

Antler Br. under construction (Sacramento River, I-5) [US 99].	Jan '41 p19
View of 50-ft. roadway.	Aug '41 p3
Completed bridge	M/A '58 p8
Bridge between Deschutes Rd. and Rt. 44.	J/A '66 p38
Dersch Rd. [FAS Rt. 1350], outmoded through-truss bridge.	J/A '66 p39
Modern highway bridges on Dersch Rd.	J/A '66 p39
Dog Creek Br., old bridge with poor approach alignment.	J/F '57 p24
New Dog Creek Br. with approaches under construction.	J/F '57 p24
Clough Cr. one-way bridge on old highway (Rt. 44).	M/J '65 p20
Lake Britton Br. on Forest Rt. 77	May '40 p25
Oak Run Creek, Rt. 44; old 4-span timber bridge that had to be replaced.	M/A '44 p19
Single span steel railroad bridge that replaced it.	M/A '44 p19
18-ft. roadway carrying highway across Oak Creek.	M/A '44 p28
Pit River Arch, longest concrete span in California in 1916, now submerged.	S/O '50 p128
<b>Pit River Br. (Shasta Lake, I-5) [US 99]</b>	
Sketch on photo of site showing planned structure.	N '39 p2+
First steel construction.	Mar '41 p14, C
Top steel girder showing workman and safety nets.	Mar '41 p15
Gap half closed between great central piers.	S '41 p2, C
Existing concrete bridge that will be submerged.	S '41 p2, C
Under construction showing safety nets, old span in background.	J/A '52 p32
View of nearly completed bridge from new approach road.	S '41 p2
Ground-eye view of bridge construction.	S '41 p2
Huge girder that required 3 freight cars to transport.	S '41 p6
Central span being placed, connecting world's highest double deck structure.	D '41 p12
Connecting the last span.	D '41 p13
Completed double deck bridge.	F '43 p2+; J/A '45 p5; M/J '52 p11; M/A '58 p8
Stream view of bridge	J/A '52 p32

Sacramento River Br. (Redding, I-5) [US 99] after widening.	N/D '61 i.cvr.; J/F '62 p15
Shasta River Br. (I-5) [US 99], deteriorated railing on.	M/A '46 p23
Sulfer Creek Br., new bridge with chain guard [Pacific Hwy.].	Mar '38 p13
Whiskey Creek Br., under construction (Rt. 299 relocation).	N/D '61 p3; M/A '62 p33

**Sierra Co.; Salmon Creek Br. on Yuba Pass Hwy. section of Rt. 49.**

**Siskiyou Co.**

Dunsmuir Br. (Sacramento River, I-5) [US 99], built 1915.	S/O '51 p4
Klamath River bridge near Seidad.	Mar '37 p9
Pit River Br. near Dunsmuir, gasoline tank truck crashes and burns.	Mar '38 p4
Salmon River Br. (covered), removed in 1942.	M/J '52 p11
Salmon River Br. at Somesbar, before/after being rebuilt	Jan '43 p14
Scott River Br. replacement span (Rt. 3 [Rt. 82] north of Ft. Jones)	N/D '59 p17



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BRIDGES, Continued**

**Solano Co.**

**Benicia-Martinez Br.**

- Sketch of proposed bridge. M/J '59 p13
- Railroad bridge across Carquinez Strait between Benicia and Martinez,  
site of future Benicia-Martinez Br. M/J '60 i.cvr.
- Pier construction. M/J '60 p35
- Sketch of bridge and Benicia interchange superimposed on photo of site. M/J '60 p37
- Aerial view of bridge site. M/J '60 p37
- Under construction. N/D '60 p61; J/A '61 p18+
- Gov. Brown and crowd at dedication. S/O '62 p2
- Completed bridge. S/O '62 p3+; N/D '62 p61
- Cordelia Wye; railroad bridge under construction. J/A '51 p63
- I-80 [US 40]; bridge units near Midway looking toward Dixon. F '47 p27
- I-80 [US 40], Vacaville; narrow bridge and street passing two school houses. F '37 p5
- New bridge where existing highway enters city on curve. F '37 p5

**Napa River Br.**

- Substructure for new bridge parallel to existing span. J/A '63 p7+
- Sketch of completed bridge. J/A '63 p7
- Prestressed precast pile being placed. J/A '63 p5
- Steel forms used for casting pre-tensioned piles. J/A '63 p8
- Completed Tower 11 footings and struts. J/A '63 p9
- Putah Creek. companion bridges under construction (Dixon--Davis, I-80) [US 40]. F '41 p25
- One of two one-way Putah Creek bridges. O '42 p11
- Rindler Creek Br. (American Canyon, I-80) [US 40] to be replaced by fill. M/A '43 p17
- Large metal culvert being installed to carry creek waters through fill. M/A '43 p17

**Rio Vista Br. (Rt. 12) [Rt. 53]**

- Old and new highway bridges across Sacramento River J/F '46 p16
- Rio Vista lift-span bridge. J/F '46 p16
- Artists concept of how merchant vessel struck Rio Vista Br. M/J '60 p52+
- Opening in crossing after missing span was carried away, and barge  
mounted derrick removing damaged members. J/F '67 p44
- Close-up view of damage. J/F '67 p44

**Sonoma Co.**

- Jenner, narrow wooden bridge on Rt. 1 [Rt. 56, Coast Rt.] near. S '38 p3
- Jimstown Br. over Russian River. J/F '50 p54+
- Petaluma Creek Br. under construction. M/J '54 p38+; M/J '55 p6+; M/A '58 p25
- Russian River Br at Hacienda, existing span which is being replaced. M/A '47 p2
- Sidehill viaduct carrying highway across slide area along Russian River. D '40 p6
- Two sidehill viaducts along Russian River under construction. D '40 p7
- Trenton Rd. highway bridge across Mark West Cr. and two roads. N/D '61 p45

**Stanislaus Co.**

- Grayson Road Br. across San Joaquin Rvr., built in 1892. J/F '64 p35
- New Grayson Road Br. J/F '64 p36
- Greer Road Br. across Stanislaus Rvr. between Turlock and Oakdale. M/J '61 p67
- Laird Slough replacement bridge. J/F '64 p35
- Stanislaus River Br. between Modesto and Escalon. N/D '59 p26
- Tuolumne Rvr. bridge and old structure it replaced, near Empire. N/D '48 p18
- Close up of new bridge. N/D '48 p19
- Tuolumne River Br. on Greer--Abers Rd. near Turlock. S/O '62 p53



# **BRIDGES, Continued**

## **Sutter Co.**

Cross Canal Br. on El Centro Blvd., Yuba City.	M/A '50 p48
<b>Feather River Br. (Marysville-Yuba City) Br.</b>	
Narrow bridge with restricted speed for loads over ten tons.	Aug '38 p2
Pier construction, looking toward Marysville.	S/O '46 p22
Completed piers looking toward Yuba City.	S/O '46 p22
Steel superstructure being erected.	M/I '47 p21
Four-lane divided approach bridge.	M/I '47 p21
Narrow existing bridge connecting Marysville and Yuba City.	M/I '47 p25
Steel bridge which replaced old span downstream.	S/O '47 p22
Attractive 4-lane divided approach on Marysville side of Feather River.	S/O '47 p23
Official group at Feather Rvr. bridge dedication.	S/O '47 p31
Steel bridge which replaced old span downstream.	S/O '47 p22
Yuba City approach to new bridge	S/O '47 p23
Official group at dedication.	S/O '47 p31
Narrow bridge with short site distance on part of Rt. 99 [US 99W].	Aug '38 p3
Nicolaus Br. across Feather River, which replaced span destroyed in 1955 flood.	J/A '59 p54:
<b>Sutter By-Pass Br., Rt. 20 [Tahoe--Ukiah Lateral]</b>	
New reinforced concrete bridge.	N '38 p13+
Bridge in flood water conditions.	N '38 p13
Jumbo moving falsework unit of deck span.	N '38 p13

## **Tehama Co.**

Blue Tent Creek Br. (I-5) [US 99].	Mar '41 p17
Dibble Creek concrete slab bridge (I-5) [US 99].	Mar '41 p17
Hayfork Creek bridge; old, narrow, and posted.	Mar '37 p8
Narrow bridge requires careful driving.	Jul '38 p1
Oregon Gulch timber bridge, not safe for legal loads.	Mar '37 p8
Paynes Creek Br. at Dales Station.	N/D '49 p8
Red Bluff Br., comparison of new, wide railroad bridge with narrow old structure.	S '38 p11
Red Bluff; timber bridge built in 1884.	Mar '37 p8
Reeds Creek Br near Red Bluff.	N/D '49 p8
Sacramento River Br. at Red Bluff, collapsed.	Mar '38 p5
Thomas Creek Br. at Paskenta showing wreckage of old span on right.	N/D '49 p8

## **Trinity Co.**

Log stringer across Trinity Rvr. on private road near Douglas City built in 1945.	S/O '50 p98
Weaver Creek Br., old span which lost a span in winter 1952 flood.	N/D '53 p27
Substructure of new bridge;	N/D '53 p28
New Weaver Creek Br.	N/D '53 p28

## **Tulare Co.**

Depression Ditch, temporary timber cut-off wall.	J/A '45 p20
Kingsburg; Rt. 99 crossing Kings River.	S/O '58 p42
Outside Cr., Rt. 198 [Rt. 10], concrete drop structure.	J/A '45 p20
S. Fork Tule River Br. under construction on relocated Rt. 190.	S/O '58 p42
White River Br. under construction.	Jul '40 p22

## **Tuolumne Co.**

Big Oak Flat underpass below tracks of Hetch Hetchy RR, below legal clearance.	Mar '39 p10
Stephens Bar steel truss bridge across Tuolumne River, 1949.	J/F '53 p19

## BRIDGES, Continued

### Ventura Co.

#### Bridges needing improvement/replacement

- Auxiliary props serve as temporary expedients to permit use of old bridge. F '38 p14
- One-way bridge on state highway over San Marcos Pass. D '38 p3
- Sharp turn at bridge on Rt. 33 [Rt. 138] between Maricopa and Ojai. D '38 p2
- Piru Creek; narrow, steel through-truss bridge between Santa Paula and Ventura. D '38 p3
- Saticoy Br. across Santa Clara Rvr.** J/A '57 p27
  - Connection between all-through truss bridge and new concrete bridge. J/A '57 p27
  - Washed out detour bridge and detour during Saticoy Br. reconstruction, 1939. J/A '57 p28
  - Southwest approach to bridge washed out during flood of 1944. J/A '57 p28
  - Prestressed girders at casting bed. J/A '57 p29
  - View along detour bridge and old span. J/A '57 p29
- Sespe Creek Br. M/A '55 p53
  - Official party at ribbon-cutting ceremony. M/A '55 p53
- Willard Br. (Santa Clara Rvr., Santa Paula) S/O '53 p54
  - Engineer's office being moved across new Willard Br. S/O '53 p43

### Yolo Co.

- Knights Landing Br., traffic signal used in one-way traffic control on. J/A '49 p29
- Monticello Br., a cut-stone arch bridge across Putah Creek, ca. 1896. S/O '50 p91
- Close-up of Monticello Br. S/O '50 p122
- Subway under tracks of Southern Pacific near Davis, newly completed. F '41 p25
- Yolo Causeway across Yolo Bypass on I-80 [US 40].**
  - Yolo Causeway before redecking Jun '40 p16
  - Redecking operations underway, traffic using two of four lanes. Jun '40 p17
  - Construction on bridge-fill freeway crossing of Yolo Bypass. N/D '61 p16
  - New eastbound Yolo Causeway. M/J '62 p44
  - View from between new twin parallel structures. M/J '62 p45
  - Aerial view of Yolo Causeway project. M/J '62 p46
  - Erecting deck units on west Yolo Causeway. M/J '62 p47
  - Substructure of Yolo Causeway ready for deck units. M/J '62 p48
  - Contractor's yard for cutting deck units. M/J '62 p49
  - Westbound lanes of Yolo Causeway under construction. N/D '62 p18

### Yuba Co.

- Feather River Br. (Marysville-Yuba City)--*See Sutter Co.*
- Yuba River Br. under construction at Marysville s. city limits, Rt. 65 [US 99E]. J/A '59 p25

## BUILDINGS

### Chino Institution buildings

- Administration Building. S '41 p16
- Barber shop, laundry and bath house. S '41 p11
- Mess Hall; Westerly dormitory. S '41 p11
- Observation cell block. S '41 p11

Humboldt Co.; new Dist. 1 office building wing at 1656 Union St. in Eureka. S/O '65 p55

### Los Angeles Co.

- Aerial view of downtown. S/O '61 p32, 40+; J/A '64 p48; M/A '65 p31; J/F '67 p28;
- California Bank Building at 6th and Spring St. S/O '61 p41
- California Hospital, model of new wing. S/O '61 p42
- Dodger Stadium, model of. S/O '61 p35
- Exposition Park showing Los Angeles Coliseum and Sports Arena. M/J '66 p15
- Hollywood Bowl during evening concert. M/J '66 p13
- Los Angeles Chinatown at night; Portuguese Bend section. M/J '66 p13

# **BUILDINGS, Continued**

Los Angeles civic center and vicinity, 1953.	M/A '64 p16
Los Angeles civic center showing addition of buildings in mall area, 1964.	M/A '64 p17
Los Angeles Civic Center, 1933.	M/A '65 p40
Los Angeles Civic Center, 1953, 1964.	M/A '65 p40+
L.A. Co. Courthouse.	S/O '61 p41
L.A. Co. Hall of Administration.	S/O '61 p40
L.A. Co. Hall of Records under construction.	S/O '61 p41
Los Angeles International Airport.	M/J '66 p12
Los Angeles Music Center.	M/J '66 p15
L.A. Co. Men's Detention Center adjacent to Union Station, sketch of.	S/O '61 p37
Music Center at Civic Center, sketch of proposed building	S/O '61 p37
Occidental Life Building, model of.	S/O '61 p35
Pacific Telephone and Telegraph Building on S. Grand Ave., mosaic in front of.	S/O '61 p44
Police Facilities Building at 150 N. Los Angeles St.	S/O '61 p40
Proposed 35-story building at 333 W. 6th St.	S/O '61 p35
Public Health Building and surrounding park in Civic Center.	S/O '61 p31
Security First Nat. Bank, proposed new addition to farmers and merchants branch.	S/O '61 p43
Signal Oil Building on Wilshire Blvd.	S/O '61 p40
Southern Counties Gas Co. Building at 8th and Flower St.	S/O '61 p41
State Highway Building in Los Angeles	S/O '49 p20
S.V. Cortelyou and Fred J. Grumm at dedication.	S/O '49 p20
Tishman Building and Statler Hilton Hotel on Wilshire Blvd.	S/O '61 p40
Union Oil Center Building along Harbor Fwy.	S/O '61 p29
<b>Moving Buildings for right-of-way</b>	
Alameda Co.	
Airplane hangar being mover for Webster St. Tube.	N/D '59 p42
Building before move.	N/D '59 p43
Supplementary asphalt ramp built to accommodate warehouse rolling stock.	N/D '59 p43
Section of floor of old building which sank beneath foundation in places.	N/D '59 p43
El Dorado Co.; Placerville Shakespeare Club building being moved.	J/F '52 p34
Christian Science Church being moved.	J/F '52 p34
<b>German Lutheran Cross Church moving</b>	
View from church tower during move.	J/F '48 p25
Church en route to new site.	J/F '48 p26, 27
Group of on-lookers observing move.	J/F '48 p28
South corner of front of church, showing arraignment of supporting timbers, shoes, rollers and rails.	J/F '48 p30
Church being towed longitudinally along city streets with the newly constructed basement and concrete foundation in foreground.	J/F '48 p31
Gold Rush-era architecture, examples of.--See also <i>HISTORY, Places, etc.</i>	M/J '66 p27, 45
<b>Los Angeles Co.</b>	
Apartment building cut into five units to facilitate moving.	M/A '56 p40
Apartment house in process of being reassembled at its new location.	M/A '56 p69
Fully reassembled at new location.	M/A '56 p69
Frame residence prior to relocation; Same residence after relocation.	M/A '56 p70
Apartment building moved to corner of Rosewood and New Hampshire Ave. in L.A.	M/J '48 p14
Craftsman home before removal; in new location, considerably altered.	M/J '49 p36
Demolition of Hotel Philben for freeway clearance in Los Angeles.	M/A '58 p22
Fire station in city of L.A. blocked up before being moved.	M/A '58 p22
Same building in new location.	M/A '58 p23

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**BUILDINGS, Continued**

House after being moved 15 miles to new lot; House one year later.	J/A '52 p42
Fish pond in center of home's garden.	J/A '52 p43
Frame dwelling being moved from old location.	M/J '48 p15
Lots in L.A. area displaying homes that are for sale and ready to be moved.	M/A '56 p71
Queen Anne home in downtown L.A.; after removal, drastically changed.	M/J '49 p38
3-story commercial building with apartments above, at original location;	
Same building with stores removed from underneath, at new location.	M/J '49 p40
Single-story bungalow at old location; after relocation, completely altered.	M/J '49 p36
Spanish-style home at original location; at new location, very altered.	M/J '49 p40
2-story house at original location; remodeled at new location.	M/J '49 p36
2-story home before removal; same home after relocation, very altered.	M/J '49 p38
2-story duplex before removal; at new location with slight changes.	M/J '49 p40
Victorian home at old location; at new location, showing many architectural changes.	M/J '49 p36
San Joaquin Co.; moving Pacific T&T Co.'s brick repeater station for Ripon-Manteca Fwy.	N/D '53 p26
Shasta Co.; Anderson before and after right-of-way clearance for US 99.	S/O '51 p10
<b>Sacramento</b>	
Headquarters Laboratory building, cornerstone-laying ceremony.	J/A '58 p15
Materials and Research Dept. headquarters laboratory, exterior.	J/F '59 p57
First highway laboratory built at State Fairgrounds, 1913.	N/D '52 p47
Public Works Building [Transportation Building].	Jun '37 p19
Public Works Annex.; Chester H. Warlow (CHC) laying cornerstone.	N/D '52 p58
State Business and Professional Building [Legislative Offices].	Apr '40 p13
<b>State Capitol Building</b>	
Old cast iron columns.	S/O '49 p38
Reconstruction wall after removal of semicircular wing from east side.	S/O '49 p39
Strengthening center brick wall below second floor with gunite.	S/O '49 p40
4-floor level, showing box girders at cut line.	S/O '49 p41
Tractor operating on 4th. floor during demolition operations.	S/O '49 p42
Partial view of the foundations for new wing.	S/O '49 p60
<b>San Bernardino; State Division of Hwys. Office building</b>	
Excavation started on new building April 17, 1951.	N/D '52 p50
June 13, 1951, ready to wrap up basement section of east wing.	N/D '52 p50
Front view of old building, which serves as main entrance to new structure.	N/D '52 p50
Completed building.	N/D '52 p50
Front entrance to new expanded building.	S/O '61 p73
Guests in lobby prior to touring new building.	S/O '61 p73
<b>San Francisco Bay Area</b>	
Cow Palace and environs.	S/O '51 p54; S/O '54 p43; S/O '55 p33
Candlestick Park and vicinity on opening day of baseball season, 1963.	M/J '63 p25
Psychiatric Clinic, U.C. Medical School; sketch of proposed building	Jan '40 p13
State office building; Gov. Knight and official party at ground-breaking.	S/O '57 p57
<b>Transbay Transit Terminal</b> [Bay Br. Railway Terminal Building]	
Drawings of proposed terminal building.	Mar '37 p17; Aug '37 p27; Jan '38 p27
Center unit well under construction, and streetcar ramp.	May '38 p10
Scene at official opening and dedication.	F '39 p6
One of four passenger platforms on upper terminal level.	F '39 p7
Mezzanine concourse entered from street car ramp, and ground-floor waiting rooms.	F '39 p7
Frank W. Clark delivering dedication address.	F '39 p8

## BUILDINGS, Continued

Terminal Plaza showing trolley car loop ramp to mezzanine level, and street entrances for pedestrians and automobile passengers.	F '39 p9
Official party at dedication.	F '39 p9
New stairway flanked by escalators.	J/F '60 p59
Bus loop connection with Bay Br. and freeway approach ramps.	J/A '60 p35, 41
Front of Transbay Transit Terminal.	J/A '60 p36
Passengers boarding busses in remodeled terminal.	J/A '60 p37

## CALIFORNIA HIGHWAY COMMISSION

California and Arizona commissioners at joint session in San Diego.	M/A '45 p23
1911 CHC.	J/A '61 i.cvr.
1937 CHC, group photo.	S '37 p11
1958 CHC in session.	S/O '58 p32+
1961 CHC.	J/A '61 i.cvr.
1965 CHC in session.	M/J '65 i.cvr.
CHC with Director of Public Works C.H. Purcell.	S/O '43 p3
CHC with Frank W. Clark.	Aug '39 p13; Apr '39 p7
CHC at work on 1956-57 budget.	J/A '55 p46
CHC at April meeting in Sacramento.	N/D '65 p2
CHC, staff members, Dept. of Hwys. officials, city and county representatives, and private citizens at a regular monthly meeting.	N/D '60 p3
Chester H. Warlow and James A. Guthrie taking oath of office.	J/F '57 p43
Hopkins, Harry A., Chairman, addressing Administration Committee of AASHO at annual convention in San Francisco.	F '37 p17
Individual members of-- <i>See PEOPLE INDEX, Non-Employees</i>	
Joint meeting of CHC and California State Park Commission in session.	M/A '64 p36+
Members first State Highway Commission appointed Aug. 9, 1911.	S '37 p11
San Francisco Chamber of Commerce and CHC	N/D '52 p55; S/O '53 p45; S/O '55 p50
State Chamber of Commerce and CHC.	S/O '49 p9; J/A '51 p27;
	J/A '52 p63; J/A '53 p54; S/O '54 p44; S/O '55 p54+; S/O '60 p40

### Tours made by

CHC inspecting Southern California freeways	S/O '55 p53
CHC on bus tour of San Francisco area highways.	J/F '59 p14
Northern California; CHC at luncheon in Garberville.	J/A '59 p17
Redwood Empire tour with governor	
CHC members with Gov. Earl Warren on tour of Redwood Empire.	S/O '45 p1
Gov. Warren and members of State Park Commission.	S/O '45 p31

### San Joaquin Valley tour

CHC viewing Tulare bypass.	J/A '52 p55
Ford Chatters and A.L. Evans of the <i>Lindsay Gazette</i> with James A. Guthrie.	J/A '52 p55
CHC and group at Madera.	J/A '52 p55
Touring party making stop at Fresno	J/A '52 p55
Director Frank Durkee addressing group at Bakersfield.	J/A '52 p55

## CONVICT LABOR

Early day prison road camp, ca. 1920s.	M/A '49 p4
<b>Hand labor methods of construction in mountainous areas with inmate labor</b>	
Track and dump-car in Shasta Co., 1916.	M/J '49 p26
Team, plows, and Fresno scrapers along Smith River in Del Norte Co., 1923.	M/J '49 p26
Finishing roadway with horses and carts along Klamath River, Siskiyou Co., 1920.	M/J '49 p27
Excavation teams and slip scrapers in Mendocino Co., 1916.	M/J '49 p27
Pioneering trail on N. Fork of Yuba River, Sierra Co., 1916.	M/J '49 p27

## **Convict Labor, Continued**

- Construction in Kings River Canyon, (Fresno Co.) with inmate labor, 1936. M/J '49 p28
- Erosion control with prison labor on Angeles Crest Hwy., Los Angeles Co., 1938. M/J '49 p29
- Typical hard rock excavation on Feather River Canyon Hwy. in Plumas Co., 1936. M/J '49 p30
- Construction on Modoc Co. project, 1949 using free operators and inmate labor. M/J '49 p31
- Humboldt Co.; Honor Camp No. 42 established for work on Rt. 299. N/D '61 p22
- Inmates gathered at San Quentin Prison's mess hall for a New Year's show, 1939. N/D '49 p27
- Los Angeles Co.; Angels Crest Hwy., Honor Camp No. 37.**
- Cottages and schoolhouse for highway employees and their families. N/D '56 p16
- Before, and after heavy snowfall, indicating 12-ft. depth of snow. N/D '49 p25
- Free family quarters near Camp 37. N/D '49 p25
- Camp equipment shop. N/D '49 p25
- Removing snow from road through camp. N/D '49 p25
- Clearing snow to office entrance. N/D '49 p25
- Mariposa Co.; Prison road camp "E" on Merced River., Rt. 140, 1924. M/A '49 p5
- Modoc Co.; prison camp kitchen and mess hall of Camp 39 on US 395, late 1940s. J/A '49 p25
- Monterey Co.
- Camp 26 built in 1932 at Anderson Canyon, Rt. 1, overlooking the ocean. J/A '49 p27
- Prison road camp inmates from first half of twentieth century. J/F '50 p25
- San Diego Co.
- Prison Road Camp No. 38 on Rt. 163 [Rt. 77]. M/J '50 p41
- Prison road camp in Moose Canyon ca. 1940s on Rt. 163 [US 395]. M/A '49 p6
- Camp 40 barracks housing 24 men each; Interior of barracks. J/A '49 p26
- San Luis Obispo Co. tent camp established at Salmon Creek on Rt. 1, ca. 1928. J/A '49 p28

## **CULVERTS**

- Alameda Co. I-580; Boehmer Hill-Castro Valley
- 84-in. pipe installation showing relative position to existing traveled way. J/A '57 p19+
- Completed aero energy dissipaters. J/A '57 p19
- Riprap section of channel approaching 20-ft. arch culvert. J/A '57 p20
- Arch culvert under construction on Antelope Valley Fwy. (Los Angeles Co.). J/F '64 p6
- Arch culvert under embankment between Wicks Corner and Jarbo Gap (Butte Co.). M/J '64 p61
- Arch culvert being built to carry waters of Irwin Cr. under four streets beneath viaduct through San Rafael. Jul '40 p8
- "Beaver-proofing" culverts
- Creosote bucket still on fence; Beaver-proof barrier around culvert. J/F '56 p44
- Box culvert; stages of installation on US 101 near Santa Maria. J/F '53 p52
- Bridges replaced by culverts and fills**
- Bridge, and replacement of same by pipe and fill M/A '47 p24
- Cattlepass bridge before/after replacement by fill. M/A '47 p25
- Long trestle before, and after replacement by culvert. M/A '47 p26
- Short span trestle, and after replacement with concrete arch. M/A '47 p26
- Sidehill viaduct, same spot after fill replacement. M/A '47 p24
- Trestle before and after replacement with culvert. M/A '47 p27
- Check dam along Santa Clara Rvr. near Tick Canyon Wash freeway bridge. J/F '64 p8
- Concrete drainage culvert under construction in Puerco Canyon (Rt. 1, L.A. Co.). M/A '47 p18
- Corrugated metal culvert across Lee Vining Cr. at entrance to Yosemite Nat. Park. M/J '52 p15
- Culvert distortion under fill at Apple Canyon (L.A. Co.), setting up reference length bar for photographic measuring of. N/D '66 p3

## **CULVERTS, Continued**

### **Debris Deflectors**

Steel rail debris deflector.	O '42 p6
Wire and pipe debris deflector.	O '42 p6
Wooden pile debris deflector.	O '42 p6
Metal debris riser.	O '42 p6
Typical small culvert failure due to detritus and light floating debris at entrance.	O '42 p6
Types of steel rail debris racks.	O '42 p7
Pipe debris rack.	O '42 p7
Debris spillway entrance on rock slope.	O '42 p8
Lined debris spillway entrance.	O '42 p8
Debris basin spillway typical in mountainous terrain.	O '42 p8
Debris crib of reinforced concrete.	O '42 p9
Timber debris crib.	O '42 p9
Debris crib of hewn timber.	O '42 p9
Desert culvert construction on US 95, San Bernadino Co.	F '42 p11
Double-arch culvert of railway at Las Flores Cr.	M/J '43 p9

### **Earth-loading factors affecting field installations of culverts**

Culvert installation rock cushion and bedding in lieu of high compaction backfill.	M/A '43 p9
Rock cushion on yielding subgrade for reinforced concrete arch culvert.	M/A '43 p9
Crusher run backfill placed and jetted by contractor in lieu of compaction backfill.	M/A '43 p9
Flexible culvert on embankment subgrade covered with earth.	M/A '43 p10
Rigid culvert on embankment sub-grade covered with earth.	M/A '43 p10
Masonry arch culvert under construction.	M/A '43 p11
Same culvert loaded by end-dumped material on one side.	M/A '43 p11

### **Entrances and headwalls of culverts**

Concrete pipe with rounded lip entrance.	D '42 p4
Drop entrance with warped wings and radial bucket outlet on Rt. 126 [Rt. 79], Los Angeles Co.	Jan '47 p12
Rounded lip entrance to concrete box culvert.	D '42 p5
Forms for throat entrance to concrete arch culvert.	D '42 p6
Warped wing headwall with rounded-lip crown at entrance to box culvert.	D '42 p6
Stepped "U" type End- wall, most inefficient type.	D '42 p7
Open lined training channel to concrete box culvert.	D '42 p7
Multiplate culvert endwall without miter or skew cut.	D '42 p8
Entrance to multiplated culvert.	D '42 p8
Flare-siphon culvert construction at Vallejo Creek.	F '43 p7
Flat arch culvert under a low fill. at Myers Creek, Imperial Co.	M/J '43 p9
High arch culvert replacing bridge at Seaman's Gulch on Rt. 299, Shasta Co.	Jan '47 p12
Hydraulic Energy Dissipaters of different lengths being tested.	J/A '61 p67+
Kern Co.; dip in Rt. 14 [US 6] through Red Rock Canyon replaced by fill and culvert.	May '41 p6

### **Life expectancy of culverts, testing for**

Bituminous-coated corrugated metal pipe being inspected.	J/F '61 p44
Comparison of two 30-year old corrugated-metal pipe culverts.	J/F '61 p43
Machine measuring the minimum electrical resistivity of soil.	J/F '61 p43
Measuring electrical resistivity of a soil in the field.	J/F '61 p43
Measuring pH of a stream, used to estimate perforation time of metal culverts.	J/F '61 p46

### **Location and slope of culverts in California**

Bottom location-reinforced concrete arch on curved alignment, uniform gradient.	N '42 p6
Bottom location-reinforced concrete arch on straight alignment, broke gradient.	N '42 p6
Modified bottom location-corrugated metal pipe, with entrance in bottom of ravine.	N '42 p6
Invert steps herring-bone roughened to create turbulence, reduce outlet velocity.	N '42 p7
Fluted sidewalks to further reduce velocity (McNamee Creek, Mendocino Co.).	N '42 p7



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

## **CULVERTS, Continued**

Log culvert on Lake Tahoe Wagon Rd. (US 50).	S/O '50 p88
Merced Co., Rt. 152; arch drains	
Arch structure required for "Big Fill."	J/A '65 p4
Arch before construction of "Big Fill."	J/A '65 p4
Bin wall constructed to contain fill slope in steep canyon.	J/A '65 p4
Multi-plate culvert used in construction of Carmel-San Simeon Hwy. (Rt. 1).	Jul '37 p4
Nevada Co.; installing culvert as part of Colfax Ave. widening project, Grass Valley.	J/A '60 p50
Orange Co.; Rt. 73, culvert being built, Santa Ana.	Jun '41 p23
<b>Outlets and endwalls of culverts</b>	
Projecting culvert with temporary extension.	Jan '43 p8
Soft bed rock scoured rapidly by accelerated boulder-laden flow.	Jan '43 p8
Nojoqui Creek culvert in 1940, after discharge of 640 second-feet.	Jan '43 p9
Nojoqui Creek culvert after 2,000 second foot flood, Dec. 1941.	Jan '43 p9
Construction of warped end wall.	Jan '43 p9
Bucket outlet deflects Salt Cr. through angle of 70 degrees.	Jan '43 p10
Close-up of Salt Cr. outlet shooting at 22 ft per second.	Jan '43 p10
Drop inside arch culvert on Rattlesnake Creek	Jan '43 p10
Warped endwall which proved too short.	Jan '43 p11
Plank culvert typical of standards on early roads assumed as state routes, 1895-1912.	S/O '50 p88
Quintuple culvert of rubble masonry and metal arches, Moose Canyon, San Diego Co.	M/J '43 p10
R.C. arch culvert 462-ft. long under 70,000 cu. yard embankment.	N/D '48 p43
Reinforced concrete arch near Agua Dulce Canyon Rd. (Los Angeles Co.).	J/F '64 p6
Reinforced concrete box culvert under US 101 (Teclote Cr., Santa Barbara Co.).	O '41 p10
Riprap wall separating left bank of Santa Clara Rvr. from Antelope Valley Fwy.	J/F '64 p8
San Bernardino Co.	
Chimney type inlet to corrugated metal pipe culvert on Cajon Pass Hwy. (I-15).	Jul '39 p18
Placing of concrete pipe; construction of box culvert. (I-10, Redlands)	D '40 p9
Reinforced concrete box culvert being constructed on Cajon Pass Hwy. (I-15).	Jul '39 p18
San Diego Co.	
Culvert drainage construction on project north of Oceanside.	O '37 p9
Concrete arch culvert (I-8, Mt. Springs Grade).	Apr '41 p21
Santa Clara Co.	
Heavy reinforced concrete arch culvert being built under an old arch bridge.	
Both will be buried in the fill at that point on new route (Rt. 17).	O '38 p6
Rt. 152; steel and concrete culverts involved in Pacheco Pass realignment.	F '39 p12
Tehama Co.; ford on old Rt. 36, and culvert which replaced ford.	N/D '57 p53
Triple concrete box culvert in Long Valley Creek, Rt. 36 [Rt. 29], Lassen Co.	N/D '46 p10
Three pipe battery culvert; Triple box culvert. (Rt. 14 [US 6], Kern Co.).	May '41 p6

## **DAMS & CANALS**

### **Central Valley Project**

Central Valley Project Committee, group photo.	D '39 p4
Gov. Olson and official party on inspection tour of Shasta Dam and other highway and bridge units of the Central Valley Project.	Jun '40 p14
Panoramic perspective of Central Valley Project (drawing).	Mar '39 p4
Typical area of irrigated orchards & vineyards in 1923, Tulare Co., flourishing before water supplies were exhausted.	Mar '37 p3
Same area in 1936 with dead trees and vines removed.	Mar '37 p3



## DAMS & CANALS, Continued

### Contra Costa Conduit

- Official group at Contra Costa Conduit ground-breaking. D '37 p17  
Steam shovel digging up first load of earth and dumps it, signaling start of work on project. D '37 p17  
Under construction, showing siphon under county road. May '38 p16  
Workmen installing steel reinforced bars on sides and bottom of canal. May '39 p5  
Concrete lining machine and finishing racks used on canal. May '39 p5  
Completed section of canal near Antioch. May '39 p5  
First water being pumped through canal for use of Pittsburg City. O '40 p5  
Completed canal, with lift pumping plant in background. O '40 p5  
Coyote Dam under construction at Coyote Valley near Ukiah. M/J '57 p3, BC  
Joint Legislative Interim Committee on Water Problems, group photo. Jan '42 p8

### Friant Dam

- Diagram sketch of dam on photo of dam site showing span across San Joaquin River, location of spillway and canal outlets. O '39 p2+  
Friant Camp: headquarters office and dormitory, and duplex cottages on 2nd Ave. O '39 p5  
Dam site looking across San Joaquin River toward right abutment. D '39 p2  
Frank W. Clark, H.L. Ickes, and Gov. Olson at Friant Dam ground breaking. D '39 p3  
Celebration commemorating first bucket of concrete at Friant Dam. Aug '40 p4  
Progress of concrete pouring made by trestle and crane system. S '41 p13  
Joint Legislative Interim Committee at Friant Dam. Jun '42 p15  
Completed dam near San Joaquin River, completed except for control gates. F '43 p11

### Kennett Dam

- Calyx core drilling machine used to explore rock foundations at dam site. Mar '37 p4  
Cores taken out by calyx drill typifying the solid rock foundation upon which Kennett Dam will be placed. Mar '37 p5

### Lexington Dam chute extension

- Final grading and drain excavation looking downstream. M/A '55 p34  
Looking down on flit-bucket terminus of original chute. M/A '55 p34  
Partially completed floor of chute extension. M/A '55 p34  
Completed spillway extension. M/A '55 p36

### Madera Canal under construction.

- Monticello dam site at "Devil's Gate." Jul '41 p12  
Nicasio Dam and rerouted section of Nicasio Rd., aerial view. M/A '55 p17  
Oroville Dam site and artist's conception of finished project. J/A '61 p51  
Gov. Knight delivering address at Oroville Dam ground-breaking. J/A '53 p33  
Rector Canyon Dam (Napa Co.); heavy construction equipment at work at site. M/J '57 p29  
Official party at celebration for Rector Canyon Dam. M/J '46 p20  
San Gabriel Dam; Gov. Merriam at dedication. M/J '46 p21  
Stepped face of dam and magnitude of this flood control project. Aug '37 p9  
Aug '37 p21  
San Francisco Bay Barrier  
Board of consultants to investigate potential barrier. J/A '54 p16  
Gov. Knight, Frank Durkee, State Engineer A.D. Edmonston, Raymond A Hill, and noted Dutch engineer C. Biedmond, hired to participate in barrier study. J/A '54 p17  
San Vicente Dam under construction; completed dam. J/F '44 p14

### Shasta Dam

- Camp near dam site in which employees of Bureau of Reclamation will live. Jun '38 p2+  
Official group at Shasta Dam dedication ceremonies. N '38 p9  
Shasta Dam site. N '38 p8; Jun '38 p1  
State Water Dept. officials at Shasta Dam site. N '38 p11  
Official sketch of Shasta Dam unit of Central Valley Project. Mar '39 p3  
Excavating diversion channel at dam site for Sacramento River. Mar '39 p5; May '39 p3

## DAMS & CANALS, Continued

Dump trucks placing excavated material in intermediate zone of upstream embankment section.	May '39 p26, C
Bypass tunnel through which main line railroad traffic will be rerouted.	May '39 p33
Temporary by-pass tunnel through west abutment of Shasta Dam.	Jul '39 p2
Railroad bridge across Sacramento River near Redding under construction.	Jul '39 p3
One of twelve tunnels under construction.	Jul '39 p3
Completed section of grading north of Redding.	Jul '39 p3
Conveyor belt system.	F '40 p3
Dam site ready for pouring, showing power house site and flume excavations.	Aug '40 p3
First bucket of concrete at Shasta Dam.	Aug '40 p4
"Twelve-toed Petes" are tail towers supporting half-mile cables from the head tower at Shasta Dam.	Aug '40 p5
Construction of huge blocks of concrete on site of East abutment of dam.	O '40 p2
Progress of concrete pouring made by cable system.	S '41 p12
Shasta Lake, showing flood control valves.	J/F '46 p6, C
Shasta Dam and Reservoir, Mt. Shasta, aerial view [US Navy photo].	N/D '49 p61
State Water Resources Board, 1945 with Gov. Warren.	N/D '45 p4
Ward Creek earth fill dam site in Hayward, topographical aerial photo.	J/F '62 p64

## DIVISION OF HIGHWAYS

Accounting Dept. personnel gathered for briefing and training.	N/D '66 p32
Brand adopted by first CHC for use on livestock owned by highway dept.	J/A '52 p47
Emblem used on motor vehicles owned by Division of Highways, 1952.	M/J '52 p47
Fiscal management development course in session.	N/D '65 p68
Headquarters Correspondence Practices Committee members.	J/A '64 p42
Maintenance Dept.--See <i>MAINTENANCE</i>	

### Materials and Research Dept.

#### Administration and Services section

Activities of.	M/J '57 p15
Administrative Assistant; Mail Desk.	M/A '58 p40
Photographer.	M/A '58 p41
Draftsman at work.	M/A '58 p42
Concrete beams used for endurance testing.	N/D '62 p31
Dist. 4 materials laboratory underneath Bayshore Fwy.	N/D '64 p28
Instruments and equipment used by Materials and Research Dept.	M/J '57 p17+
Fluorescent lamp being installed for testing in integrating photosphere.	N/D '62 p29
Foundation section crews ready to correct a serious slipout on a major highway.	M/J '57 p14
Materials laboratory building adjacent to Santa Monica Fwy., Los Angeles.	M/J '65 p43
Materials and Research Conference, design and materials engineers at.	J/A '63 i.cvr.
Materials and Research engineers show visiting German delegation a box beam median barrier on field test location.	N/D '66 p8
Materials and Research Laboratory library.	S/O '57 p19

#### Materials and Research Lab., Sacramento

Original facilities (1912-1921) located on State Fair Grounds.	S/O '50 p159
Lab. Building constructed at 34th and Serra Way, Sacramento (1921).	S/O '50 p159
Lab. after 1933 enlargements	S/O '50 p159
Testing and Research Lab ca 1950.	S/O '50 p161
Representatives of the Materials and Research Dept. and engineers from the Bridge Dept. at the plant of a steel fabricator.	M/J '57 p14
Standardization of weights and balances.	M/A '58 p43

## **DIVISION OF HIGHWAYS, Continued**

### **Structural Materials section, testing conducted by**

Corrugated metal and reinforced concrete pipe undergoing inspection.	N/D '57 p35
Inspection of structural steel fabrication.	N/D '57 p36
Stress and strain measurements being made of a wire strand.	N/D '57 p36
Close-up of strand after being loader to failure in testing machine.	N/D '57 p36
Metallurgist studying the microstructure of a metal specimen.	N/D '57 p37
Interior of a mobile radiographic truck with portable X-ray equipment.	N/D '57 p37
Engineer examining radiographs of welded joints.	N/D '57 p37
Experimental model of electronic compaction control equipment.	N/D '57 p38
Experimental study concerning rate of corrosion.	N/D '57 p38
Tensile testing of fabric material in an electrohydraulic tensile tester.	N/D '57 p39
Testing engineer and instrument maker making final adjustments on recorder.	N/D '57 p39
"Undisturbed" tube samples of soil being sealed and labeled for shipment to Headquarters Materials and Research Dept. Lab.	N/D '62 p33
Visitor from Trinidad being shown a California test method.	M/A '58 p44
X-ray Diffraction and Spectroscopy Unit at work.	N/D '62 p29
Seminar for district accounting officers in session.	N/D '64 p68
<b>Service and Supply (Stores) Department</b>	
Los Angeles warehouse	
Under construction, showing rail facilities and portion of hard-standings.	J/F '49 p13
Portion of warehouse stock of survey stakes at Los Angeles.	J/F '49 p13
Sacramento warehouse, interior view.	
Loading dock and rail unloading facilities.	J/F '49 p13
Stockpiling operations.	S/O '49 p44+

## **DOCUMENTS AND RECORDS**

### **Blueprinting**

Feeding two continuous blueprint machines in Hdqts. Reproduction Dept.	M/A '50 p61
Operator feeding small paper tracings into continuous ammonia process printer.	M/A '50 p62
Central index to Dist. 8's central map files, and map files themselves.	M/J '64 p18
General Files personnel at work, Dist 7.	M/J '64 p19
Headquarters Records Center, a low-cost storage of semiactive records.	M/J '58 p1
Portion of records marked for disposal as a result of applied schedules.	M/J '58 p4
General File Office, showing space formerly occupied by filing cabinets.	M/J '58 p5
Forklift developed to speed up filing and removal of boxes of records.	N/D '65 p37

### **Historic documents**

Facsimile of first Surveyor General certificate.	J/A '46 p3
Cover of resident engineer's field notebook for Contract No. 4 in Yuba City, 1912 on file at Dist. 3 office, Marysville.	J/A '52 p31
Page from old minute book.	J/A '46 p5
Records being photographed; Close up of photographed record.	M/A '49 p54

### **Reproduction of plans**

Reproduction machine operator demonstrating transferring of plan image to an offset paper master.	J/A '62 p45
Plan on copyboard predatory to making a photocopy.	J/A '62 p46
Checking prints runoff on duplicating machines from processed offset paper masters.	J/A '62 p46
Collating copies of plans.	J/A '62 p47
Completed set of plans being punched on multiple-head drilling machine.	J/A '62 p47
Stacks of plans ready to be shipped to districts.	J/A '62 p48

## EDUCATION

Equipment Dept. training school trailer mobile unit, interior and exterior.	M/J '53 p6
Examples of training filmstrip photos and narration.	S/O '56 p34+
Inspection procedure training course in session. (concrete).	S/O '64 p61
Test core and aggregate sample exhibit used in conducting small group lectures.	S/O '64 p62
"Training the trainers" session in progress.	S/O '64 p63
Inspection procedure instructors between sessions.	S/O '64 p64
Maintenance classes held in classroom trailer; Class receiving outdoor instruction.	S/O '54 p39
Materials and Research Engineer Thomas E. Stanton with visiting students.	S/O '45 p21
Photogrammetry class at work on individual highway locations.	M/J '51 p45
Instructor William Pryor demonstrating use of stereoscope.	M/J '51 p45
Rhodesian road commissioner J.H. Durr, student of California methods.	S/O '56 p50
Turkish engineer Fethi Komurenoglu student of California roadbuilding.	S/O '51 p63
Welding engineering class, state employees watching demonstration at.	Apr '42 p15

## ENVIRONMENTAL ISSUES

### Smog damage

Pinto bean leaf damage by smog documented by UC Air Pollution Research Center, Riverside.	S/O '66 p12
Santa Ana-Hollywood freeways in L.A. on a clear day, showing number of vehicles traveling freeways.	S/O '66 p13
Chrysler Cleaner Air Package engine.	S/O '66 p15
Special committee on vehicle pollution control inspecting emission testing equipment at Detroit auto plant.	S/O '66 p16
Gov. Edmund Brown signing key piece of auto smog legislation.	S/O '66 p17

## EQUIPMENT

Asphalt heating kettles.	D '42 p14
Asphalt raker, traveling type.	Jan '39 p20
<b>Asphalt spreaders</b>	
Horse-drawn equipment spreading asphaltic oil surface, 1913.	S '37 p22; S/O '50 p165
Emulsified power asphalt kettle, 1937.	S '37 p22; S/O '50 p165
1,850-gal. capacity oil distributor ca 1950.	S/O '50 p165
Asphalt kettle ca. 1950.	S/O '50 p165
<b>Atmometer</b> apparatus for measuring evaporation during construction operations.	J/A '62 p49
Recording unit with porcelain atmometers ready for transportation.	J/A '62 p50
Filter paper type atmometer.	J/A '62 p51
Paper atmometer, non-recording type.	J/A '62 p51
Recording unit equipped with paper atmometer.	J/A '62 p51
<b>Belt loaders</b>	
"Trough" type belt loader.	D '42 p13
"Trough" type belt loader attachment for motor grader.	D '42 p15
Travel type belt loader; Bucket loader; Tractor front-end loaders.	D '42 p15
Boom attachment designed by George Sloan.	J/A '49 p63
<b>Bridge-related equipment</b>	
California skid tester device.	N/D '65 p61
Equipment used by mobile bridge painting units.	May '42 p18+
Pile testing rig for conducting load tests developed by Bridge Dept.	J/A '50 p47
Pipe drilling rig in operation.	J/A '50 p47+
Portable floating drill barge developed by Division of Highways.	N/D '65 p63
Portable steam outfit for removing "road haze" from bridges.	J/F '46 p5

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**EQUIPMENT, Continued**

Bumpograph (measures pavement roughness), as devised by E.L. Seitz.	F '37 p27
Machine folded for transportation.	F '37 p27
Mr. Seitz operating the machine and carrying straight edge.	F '37 p27
Close-ups of marking device.	F '37 p27
Curb forms, steel-type, in sections with interlocking devices and braces.	Jan '39 p20
Deflectometer	
Benkelman Beam used under a loaded truck wheel.	S/O '60 p42
Traveling Deflectometer; P43 Sensing probe being straddled by dual tires.	S/O '60 p42
Chart recorder constructed for Deflectometer.	S/O '60 p42
Dozer spreader with spreader box blade attachment.	M/A '43 p5
Drag finisher, new type of in operation.	Jan '39 p23
Operation of mule-drawn float which reduces cost of highway finishing.	Jan '39 p23
Appearance of highway after use of drag finisher.	Jan '39 p23
Drill rig auger, cleaning operations.	J/A '56 p47
Dump trucks, types of.	M/J '43 p27
Emergency equipment; "merry sled" rescue-aid and accessories	May '41 p21
Two views showing sturdy construction of sled.	May '41 p21
<b>Erosion-Related Equipment</b>	
Bits and couplings for hydrauger drilling equipment.	M/A '55 p26
California horizontal drill.	M/A '55 p28
California sampler being disassembled to remove soil samples.	J/F '58 p19
Culvert cleaning spoon, tractor powered.	J/F '46 p4
Horizontal drill in use.	J/F '58 p22
Hydrauger drill in operation.	M/A '55 p28
Jetted mandrel, double wall type; Jetted mandrel, closed-end type.	M/A '48 p7
Large drill rig in position for making deep borings in a landslide area.	J/F '58 p17
Lever-type loading device with consolidometers in place.	J/F '58 p23
McCarthy rock-boring machine.	M/A '55 p27
Rotary drill; Rotary jet; Driven mandrel.	M/A '48 p7
Settlement measuring device used to read settlement of ground beneath the weight of a fill.	J/F '58 p21
Shaping and compacting device used to remove water from highways, front view.	N/D '48 p16
Rear view of device showing finished dike emerging.	N/D '48 p16
Windrow sizer for use ahead of shaping and compacting device.	N/D '48 p16
Spring-loaded consolidometers used to obtain test data for estimating settlement.	J/F '58 p21
Triaxial compression test for determining shear strength of soils.	J/F '58 p23
Unconfined compression apparatus for obtaining the unconfined compressive strength of clay soil.	J/F '58 p24
Vertical drilling equipment used on slide by Materials and Research Dept.	J/F '52 p59
Float finisher, new motorized mechanical type.	O '38 p16
Geodimeter nine prism reflecting unit.	M/J '62 p50
Panel view of Geodimeter unit.	M/J '62 p51
Typical operational set-up at night.	M/J '62 p52+
Various elements of reflecting unit.	M/J '62 p54
Front of Model 4 Geodimeter.	M/J '62 p55
Conducting Geodimeter course.	M/J '62 p57
<b>Graders</b>	
Attachment to finishing equipment plates on grader to make scraper.	Jun '38 p24
Auger-type rotary unit mounted on 4-wheel drive motor grader.	J/A '58 p13+
Blade grader, tow-type.	M/J '43 p21
"Curry comb" or spiked tooth type on 75-ft. boom attached to shovel.	Jan '39 p20
Elevating grader in operation at Middle Lake (Modoc Co.).	Apr '38 p25

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**EQUIPMENT, Continued**

Grader blade level device on mold-board of grader.	N '37 p27
Motor grader attachment device; device in operation.	J/F '46 p2
Light disc harrow; disc attachment for use on motor graders.	D '42 p11
Motor graders, types of.	M/J '43 p20
Motor grader with new Preco automatic blade control attachment.	J/A '57 p4
Device in operation.	J/A '57 p42
Gyroscopic equipment, ready for travel in station wagon.	J/A '52 p13
Rear of station wagon showing warning sign and flags.	J/A '52 p14
View of interior operating instruments.	J/A '52 p15
Vertical gyroscope installation; Generator and converter installation.	J/A '52 p16
Headquarters Shops, Sacramento; general view ca. 1950.	S/O '50 p167
Interior of Parts Dept. dispensing stockroom at Headquarters Shop.	S/O '51 p27
Racks for storage of tire inventories.	S/O '51 p27
Truck shop, interior.	N/D '61 p34
Trimmer preparing new fender flaps for installation on heavy trucks.	N/D '61 p34
Vehicles being serviced and repaired at Equipment Dept. truck repair shop.	N/D '60 p27
<b>Historic equipment, early twentieth-century (pre-1937)</b>	
Asphaltic oil spreader equipment, horse-drawn 1913.	S '37 p22; S/O '50 p165
Buffalo-Pitts steam roller, 1913.	S/O '50 p164
Caterpillar tractor pulling Austin-Western scarifier, 1913.	S/O '50 p164
Concrete mixer on state highway near Roseville, Placer Co., in 1913.	N/D '52 p45
Earth-moving equipment, wood-burning.	J/A '64 p29
Fordson & Monroe adjustable superior 2-way road drag, 1924.	S/O '50 p164
Fordson iron mule used on highway construction in Plumas Co., 1933-35.	S/O '50 p164
Fordson tractor with canopy top, date ca 1912-1920s.	S/O '50 p164
Liberty dump truck at job site, ca 1920s.	J/A '64 p32
Power shovel working at Alder Bluff in Del Norte Co. ca. 1925.	J/A '64 p29
Road oiler, horse-drawn, 1913; Motorized road oiler ca. 1920s.	J/F '61 p5
Roller and truck used to haul asphalt for state highway, San Mateo Co. 1913.	J/A '56 p66
Steam tractor used ca. 1900 to tow trailers transporting lumber.	M/J '65 p22
Street sweeping machine, horse-drawn 1905 model.	J/F '52 p36
Early day sweeper and his outfit.	J/F '52 p36
Stripe-marking machine, early-late 1920s hand-powered units.	O '39 p22
Truck mounted unit, early 1930s; Chassis type marker, pre-1937.	O '39 p22
Three-mule team hauling sand stuck in mud bog.	S/O '50 p164

**Litter removal equipment**

**Street sweeping machines**

Badly worn broom; Completed broom ready for installation.	J/F '52 p39
High-speed street sweeper.	M/J '53 p3
Horse-drawn 1905 model; Early day sweeper and his outfit.	J/F '52 p36
Power broom type	J/F '52 p37+; M/J '43 p25
Rotary broom cleaning a gutter on Bayshore Fwy.	N/D '64 p67
Rotary sweeper cleaning gutters on Bayshore Fwy. in San Mateo Co.	N/D '65 p23
Traction driven broom.	M/J '43 p25
Weed and brush flail; Rotary flail in operation.	M/J '55 p31
Wheel tractor attachment type sweeper.	M/J '43 p25

**Vacuum cleaner**

Dumping load; Opened rear gates of vacuum machine.	N/D '51 p47
Operator and push-button mechanism.	N/D '51 p48
Smaller sized vacuum cleaner and sweeper in operation.	J/A '52 p59
Vacuum cleaner with tow truck loaded with oversize trash.	N/D '51 p47
Vacuum trash collector in operation.	J/A '61 p54

## **EQUIPMENT, Continued**

### **Maintenance equipment, general**

Collapsible, universal truck-mounted, one-man hoist used for maintaining high roadside and overhead structures.	M/J '53 p2
Combination loading and breaking equipment pulverizing hardened bituminous pavement in process of remixing and stabilizing.	S/O '51 p33
Edge grinding machine.	J/F '46 p4
Emulsion kettle devices.	J/F '46 p2
Gravity flow screening unit.	J/F '46 p5
Heavy truck-tractor and semi-trailer unit used in expediting movement of highway maintenance and emergency equipment.	M/J '53 p4
Power loader picking up spoil from roadside ditches.	S/O '50 p157
Road-type disc scarifier assembly.	D '42 p11
Rock removal; plow mounted to front end of truck for rock removal.	J/F '46 p3
Self-propelled, self-feeding loader with portable crushing equipment used to reclaim road surfaces.	M/J '53 p4

### **Sign/lighting maintenance equipment (freeways)**

Forklift truck used to load freeway signs on a trailer.	N/D '65 p35
"Giraffe" used to relamp an electrolier on freeway.	N/D '64 p24
Hydraulically-raised truck-mounted lift used to service high voltage freeway lighting systems.	M/J '53 p5
Hydraulic tower lift truck.	S/O '56 p56
Trench-cutting tool, tractor-mounted.	J/F '46 p4
Truck shovel on slide removal work.	S/O '50 p157

Mudjack, two-wheel cart-type; Large-type mudjack.

Outrigger cutting template placed on standard bulldozer unit.	M/J '43 p21
	Jan '39 p21

### **Pavement marking equipment**

Auto with flags preceding car with stripe marking equipment.	N '41 p26
Second car with loud speaker under trunk door to warn intercepting traffic.	N '41 p27
Broken-traffic-line striping machine in operation.	S '42 p124
Dashed traffic striping machine attachments.	J/F '46 p3
Early 1920s hand-pushed striping unit; Hand powered machine, late 1920s.	O '39 p22
Experimental model operated from truck cab.	J/F '60 p62
Front view of traffic stripe marker showing guide pointer and hose connection.	O '37 p10
Rear view of stripe marker.	O '37 p10; O '39 p23
Truck body of stripe marker showing compressor, paint tanks and agitator.	O '37 p11
Full view of 1937 stripe marker in use.	O '37 p11
Improved model traffic striper in operation on I-80 [US 40] east of Roseville.	M/J '63 p51
Loaded paint striping truck.	M/J '63 p52
Paint guns and bead dispensers on end of lightweight extension arm.	M/J '63 p52
New unit with extension arm in action, and older, sulky-type unit.	M/J '63 p53
New model traffic striper in operation, 1964.	N/D '64 p30
Push-button traffic striper in operation.	N/D '61 p35

### **Spotting-wheel device for marking pavement**

Spotting wheel device Pointer assembly attached to front bumper of truck.	J/F '44 p17
Marking wheel attached to rear bumper.	J/F '44 p17
Workman controlling paint valves and wheel lifting lever.	J/F '44 p17
Spotting Device for	M/A '50 p4+
Striping machine ca. 1947.	M/J '47 p5
Detail of levers on stripe marking machine.	M/J '47 p6
Disc on cam of stripe marking machine.	M/J '47 p7
Striping machine, ca. 1959.	J/F '60 p62



## **EQUIPMENT, Continued**

### **Thermoplastic striping units**

Thermoplastic striping unit placing crosswalk markings.	N/D '62 p32
Thermoplastic striping truck.	S/O '62 p47
Stripe applicator in operation.	S/O '62 p47
Changing applicator with hot thermoplastic compound.	S/O '62 p47
Fuel tanks full of liquid petroleum for use in thermoplastic heating operation.	S/O '62 p48
Changing kettle with thermoplastic material.	S/O '62 p48
Traffic line marker with "mother" truck, 1955.	N/D '55 p49
Arrangement of paint tanks showing air driven mechanical agitators.	N/D '55 p50
Close-up of compressor and paint tanks.	N/D '55 p50
Interior view of "mother" trucks.	N/D '55 p50
Control panel on main compress of "mother" unit.	N/D '55 p50
Traffic striper with narrower tread.	J/A '61 p31
Striper unit loaded onto modified hydraulic tailgate.	J/A '61 p32
Cycling mechanism mounted under body behind the cab.	J/A '61 p32
Control panels in cab interior.	J/A '61 p33
Truck mounted unit, early 1930s; Chassis type marker, pre-1937.	O '39 p22
3-stripe center line chassis-type unit, ca. 1937.	O '39 p22
Complete striping outfit in operation restriping triple line.	O '39 p23
Close-up showing paint and air lines to each spray gun and controls.	O '39 p23

### **Paving-Related Equipment--See also PAVING & PAVEMENT**

Apparatus for moisture determination of bituminous mixtures.	J/A '57 p60
Athey loader and crusher in operation.	N/D '50 p24
Automatic weighing device for proportioning asphalt concrete mix.	O '37p18
Bituminous distributors.	D '42 p12
Concrete joint cutter operated by hand.	M/J '46 p23
Extraction apparatus to determine amount of asphalt in bituminous mixtures.	J/A '57 p60
Field-type extractor for testing moisture content of bituminous mixes.	M/A '54 p30+
Gridroller and tractor.	N/D '50 p24
Instrument used to measure supporting strength of roads for traffic loads.	N/D '66 p8
Kelley-ball device being used to determine concrete slump.	N/D '65 p25
Machine used to cut weakened plane joints at 15-ft intervals.	M/J '46 p23
Mechanical kneading compactor designed by Materials and Research Dept.	J/A '57 p60
Mechanical mixer for mixing bituminous test specimens.	J/A '57 p60
Mobile asphalt concrete plant ready to roll.	M/J '61 p58
Typical layout of mobile asphalt concrete plant.	M/J '61 p58

### **Pavers**

Looking down on steering guide of paver from operator's seat.	J/F '48 p16
Side view of paver, steering guide; Steering guide for trucks.	J/F '48 p16
Longitudinal joint shaper attachment to paver.	J/F '48 p17
Paver with transverse beam to support pendulum and control equipment.	M/A '61 p49+
Portable crane with 2500-lb. iron ball attached, used to break out old pavement.	Jun '37 p14
Iron ball in place on crane truck for transportation.	Jun '37 p14
Pressure cell on steel plate and concrete blocks placed 8-ft. below grade to test compaction strength of ball.	Jun '37 p14
Resilometer used to measure springiness of soils supporting pavements.	J/A '57 p65
Scarifier attachment behind scraper aids in working rocky formations.	S '39 p20
Self-propelled track-mounted machine spreading aggregate base.	J/F '64 p55
Slip-form paving equipment.	N/D '60 p16
Stabilometer being used to determine stability of pavements.	N/D '60 p25
Viscosimeter for determining grade of liquid asphalt.	J/A '57 p61



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**EQUIPMENT, Continued**

**Photogrammetry equipment**

Scribing with a swivel cutting tool; Scribing with a sapphire-tip cutting tool. J/A '63 p32  
Freehand instruments and needles. J/A '63 p34

Pile-driving; portable tractor-mounted pile driving rig. J/F '46 p4

Porter Rig with tools in place ready for operation. S '37 p2

Combination foundation drilling equipment dismantled and ready for road. S '37 p3

Close-up view of rig showing hand bailer, extension rod for soil sampler, churn bit rotary bucket with Kelly bar and driving yolk, and the sampler assembly. S '37 p3

Foundation inspector sitting in top of 30 ft. boring following inspection of the ground to bottom of an 80 ft. hole. S '37 p3

**Profilograph (measures/evaluates pavement roughness)**

California-type profilograph. M/A '65 p75

Completed units M/A '44 p7; M/J '57 p15

Assembling Profilograph frame; Close-up of recording mechanism. M/A '44 p7

Assembled Profilograph, ready for use; Profilograph in use. M/A '44 p7

Hand propelled profilograph. M/A '60 p54

Mobile profilograph in operation, 1955. M/A '60 p53

Multiwheel-type with 10-ft base length. M/A '60 p52

**Outside California**

Street in Pompeii showing grooves worn by chariot wheels. J/F '60 p47

Profilograph constructed by State of Illinois for Bates road test, ca. 1922. J/F '60 p47

BPR Pavement Roughness Indicator, outrigger trailer and tow car. J/F '60 p48

Multiwheel profilometer apparatus of the British Road Research Lab. J/F '60 p50

Multiple counter bump classifier used by the British. J/F '60 p51

Photo illustrating the principle of a profile correcting mechanism. J/F '60 p51

AASHO road test profilometer. J/F '60 p52

Michigan profilograph unit modeled after a California design. J/F '60 p68

Special body made for Profilograph truck. S/O '60 p40

Radiological monitoring equipment in operation. M/A '55 p60

**Research Equipment**

Auger-type earth-drilling machine mounted on truck, used for soil testing and subsurface explorations. M/J '53 p3

Bimetal thermometers being checked for accuracy. N/D '64 p28

**Corrugated shipping container**

Empty metal shipping container on scale weighs 30-lbs. J/F '51 p46

Metal shipping container with two concrete specimens weighs over 80-lbs. J/F '51 p47

Comparison of metal and corrugated paper shipping containers and sample cans which they are designed to carry. J/F '51 p48

Corrugated paper container with two concrete specimens weighs in at 60-lbs. J/F '51 p49

Gas chromatograph being used to determine the constituents of paints and solvents. N/D '65 p26

Meeting of Equipment Dept.'s Technical Research and Training Section. N/D '65 p29

Mobile coring machine used for cutting cores from finished roadways. N/D '65 p9

Nuclear device for measuring soil density being tested. N/D '62 p32

Nuclear moisture density gauges being used in field. N/D '64 p30

Nuclear units used to measure soil moisture. M/J '65 p50+

Numeac backcutter gage, which reflects gamma rays back from the soil during soil compaction testing. M/A '66 p42

Troxler transmission gage used to count gamma rays. M/A '66 p42

Rock saw with adjustable specimen holder. M/J '49 p43

Saw for cutting concrete and rock samples for lab inspection and tests. J/A '43 p16

Soil testing drill rig for Materials and Research Dept. S/O '50 p166

Stabilometer soil test in progress. N/D '60 p32

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**EQUIPMENT, Continued**

Rock shaker (Seitz) in operation; Construction of shaker.	O '37 p23
Rollers	
Pneumatic-tired rollers; Three-wheel roller.	M/J '43 p23
Roller and truck used to haul asphalt for state highway, San Mateo Co. 1913.	J/A '56 p66
Tow-type roller; Tandem roller.	M/J '43 p24
Rooter tooth shoed used to root out gutters.	Jun '38 p24
<b>Roughometers (measures roughness of pavement surfaces)</b>	
Complete Roughometer.	S '40 p14
Method of mounting Roughometer rack and roller on an auto.	M/A '60 p51
Roughometer mounted on instrument board of an auto.	M/A '60 p51
Testing Roughometer with 1-in. boards, 1931.	M/A '60 p51
Scooter pots in operation.	F '38 p22
Screed, reconstructed model; Close-up of adjusting device.	S '37 p24
<b>Seismographs</b>	
Setting off shot point for seismic record.	M/J '60 p17
Reviewing photographic record from seismograph.	M/J '60 p17
Recording camera and fire controls with a dark room, developer, and fixing bath.	M/J '60 p19
Installing a geophone along shot line.	M/J '60 p20
Refraction seismograph equipment with recording equipment and amplifier.	M/J '60 p20
Refraction seismograph; blasting in connection with geological investigations.	N/D '60 p28
<b>Shovels</b>	
Highway hand shovel (Californian), and commercial shovel, showing difference in lift and length; Man using commercial shovel; man with highway shovel.	M/J '50 p53
Truck mounted shovel; Crawler shovels.	M/J '43 p24
<b>Slope-shapers</b>	
Dyke shaper with cross section attached to moldboard of grader.	F '42 p14
View of "V" shaped attachment.	F '42 p14
Shaper attachment leaves dyke with a level top.	F '42 p15
Close-up of typical well-shaped dyke made by above attachment.	F '42 p15
Shoulder dyke shaper.	M/A '48 p20
Side ditch and back slope shaper, dismantled; Shaper in operation.	M/A '48 p20
<b>Snow-plows/snow related equipment</b>	
Auger-blower snow plow.	M/J '53 p3
High powered road grader built in Australia.	N/D '52 p60
County Road Board snowplow.	N/D '52 p61
Motor grader used to remove icepack.	N/D '64 p27
One-way snow plow; Reversible-type snow plow; "V" type snow plows.	M/J '43 p22
Redesigned rotary "Sno-blo" plow.	N/D '64 p27
Rotary snow plows.	M/J '43 p23
Snow plow with rotary mounted on motor grader in operation.	N/D '60 p27
Vehicle used to travel over frozen lakes and rivers in Manitoba, Canada.	M/A '61 p76
Spectroscope and accessory equipment.	M/J '52 p10
Spreader boxes: Gravity-type; Force feed-type; Rotating disc spreader.	M/J '43 p25

## **EQUIPMENT, Continued**

### **Survey equipment**

Geodimeter unit, theodolite, portable generator, radio receiving set, slave (reflector unit), and walkie-talkie radio set used for relocation survey. M/J '60 p16

Listening aid device used by surveyors

Recorder and chairman in foreground, levelman in distance. Jul '42 p2

"Listening aid" suspended from flag standard to receive levelman's calls. Jul '42 p2

Plumb bobs being used to transfer measurement tape to point on ground. N/D '51 p52

Plumb bob being used to center transit over survey point on ground. N/D '51 p53

Six steps to making traffic flags for use on highways demonstrated. S '42 p17

Transportation afforded state road surveyors, their instruments and equipment. S/O '44 p7

Tank car heater; retort booster heaters. D '42 p13

Tellurometer slave station; Reading Tellurometer data to recorder. S/O '60 p58

Operating Tellurometer. S/O '60 p59

Tractors; 1/2 ton truck; 3/4 ton truck. M/J '43 p26

### **Traffic counting/speed determining equipment**

Photo-electric roadside speed timer in action. May '42 p7

Units of apparatus with W.M. Rieth who supervised its development. May '42 p7

### **Vegetation control/removal equipment**

2,000-gal semitrailer watering unit constructed at headquarters shop. N/D '62 p34

Cutter developed to trim vegetation from curbing alongside highways. N/D '66 p7

Evans spraybar used in eliminating vegetation along highways. Jan '42 p28

Roadside spray proportioner, proper use of demonstrated. N/D '65 p28

Viagraph (road surface meter), newly designed model, 1939. D '39 p12+

Viagraph designed by L.A. Road Dept.; Viagraph-Traceur used in France. J/F '60 p49

Volumeter in use. Mar '38 p14

C.N. Wilzek, designer, operating Volumeter. Mar '38 p14

Close-up of Volumeter showing the design of its construction. Mar '38 p15

Water load counter designed for installation on water trucks. N/D '62 p30

### **World War II conservation efforts**

Power shovels transported to Sacramento Hwy. Shops by freight car for extensive repairs, replacement, and overhauling. S/O '43 p8

Adding new metal to worn crankshaft with metalizing machine. S/O '43 p9

Sharpening scarifier discs by cutting new edges. S/O '43 p9

Repairing heavy-duty Hesselman oil engine of power shovel. S/O '43 p9

Forging steel bar with power hammer. S/O '43 p9

Large oil heating retort on trailer constructed of salvaged materials. S/O '43 p10

1,100-gallon road oil distributor built with used parts from other units. S/O '43 p10

## **EROSION CONTROL--See also EQUIPMENT, Erosion-related**

### **Bank Protection**

Bank protected by sand bar formed downstream from steel tetrahedron jetty on Santa Clara Rvr., Ventura Co. Jul '39 p7

Bar formed below tetrahedron jetty. Aug '38 p11

Cable connected jackstaws used to stop bank erosion. Aug '38 p11

Concrete crib members being made at camp between Junction City and Helena. Mar '41 p11

Concrete riprap bank protection (US 50)

Bags being filled at concrete mixing machine for placement on Cache

Creek embankment. Jan '40 p20

Close-up of concrete riprap bags at Cache Creek. Jan '40 p20

Filled bags of concrete being delivered by chute. Jan '40 p21

## EROSION CONTROL Bank Protection, Continued

### Deflectors

Deflector construction with 27 in. redwood logs.	May '41 p4
Floodwater damaged section of US 101 on Eel River, Humboldt Co. where deflectors have been laced to protect bank.	May '41 p2
Riprap section that withstood flood currents.	May '41 p3
Triangular timber deflectors protecting banks and redwood tree groups.	May '41 p3
Portland cement concrete revetment along Santa Clara Rvr., Ventura Co.	May '42 p13
Reinforced asphalt concrete channel lining near Fillmore, Ventura Co.	Jul '39 p8
Reinforced concrete channel lining on Santa Clara River near Saugus in L.A. Co.	Aug '38 p12
Rock riprap and wire mattress protection of left bank of Eel River below Dyerville.	Jan '43 p4
Left bank of Eel Rvr. showing extent of erosion since 1939.	Jan '43 p5
High bank of alluvial silt cut to steep slope.	Jan '43 p5
Sacked concrete in use 10 years on Van Duzen Rvr., Humboldt Co.	Jul '39 p8
Sacked concrete revetment on Grizzly Cr., Lake Co.	Jul '39 p8
Sacked concrete revetment on Russian Rvr., Mendocino Co.	Jul '39 p7
Sacked concrete revetment with wire mesh and rock toe mattress, Eel Rvr.	Jul '39 p7
Sacked concrete riprap along Santa Clara Rvr., Ventura Co.	May '42 p12
Sacked concrete slope paving placed on banks of Trinity River for protection at flood stages.	Mar '41 p9
Steel rail and cable, and rock fill double fence bank protection.	May '42 p14
Steel rail and wire fence backfilled with rock and brush.	Aug '38 p11
Steel rail tetrahedrons and sacked concrete riprap along Santa Clara Rvr.	May '42 p13
Steel rail tetrahedrons on Salinas Rvr., Monterey Co.	Jul '39 p7
Toe of gunite facing protected by conformance of articulated concrete block apron, Pacoima Cr. L.A. Co.	Jul '39 p9
Precast cribbing protection on Trinity River.	Mar '41 p11
Toe rock excavation, Punta Gorda project.	J/F '55 p37
Lima 803 crane placing rock backing in riprap section.	J/F '55 p38
Crane placing toe rock behind sand dike.	J/F '55 p38
Redwood crib on Trinity River with men standing next to it to show size.	Jul '37 p22
River bed and road above where erosion occurred.	Jul '37 p22
Wire and rock mattress, strips of being placed in riverbed at foot of riprap protected slope (Trinity River).	Mar '41 p8
Wire mesh and rock mattress.	Aug '38 p11
Wire mesh revetment on Cow Cr. in Shasta Co.	Jul '39 p8

### DRAINAGE

#### Angels Crest Hwy. (Rt. 2) drainage features (L. A. Co.)

Grouted rock channel entrance to paved spillway.	Apr '39 p21
Paved spillway and planted slopes.	Apr '39 p21
Spillway paved with concrete blocks.	Apr '39 p21
Terrain with spillway entrances in foreground.	Apr '39 p21
Wattle spacing, an early experiment in.	N/D '49 p40
Concrete check dams on Bradley-King City highway along creek channel to prevent excessive erosion in canyon section. (Monterey Co.).	M/A '43 p4
Concrete check dams retard velocity of runoff water on steep grade.	J/F '50 p40
Drainage channel flanking Rt. 126 Fwy. in Ventura Co.	S/O '62 p44
Drilling crews sample subsurface materials for foundation exploration.	N/D '65 p25
Measuring weight and volume of material removed from excavated hole.	N/D '65 p25
Drilling operations to obtain soil for testing purposes.	N/D '60 p23
Glen Annie Cr. channel change near Goleta, part of US 101 project.	M/I '62 p38

# **EROSION CONTROL Drainage, Continued**

Grapevine Canyon (I-5) drainage system	
Flume paralleling highway for carrying creek waters past slide area.	Mar '42 p15
Work on reinforced concrete lining of flume.	Mar '42 p15
Special spillway constructed at flume's lower end.	Mar '42 p15
Horizontal drain, and boring being made for another drain.	J/F '58 p20
Horizontal drain near Whitmore slide area (I-80).	N/D '65 p27
Humboldt Co.; digging drainage ditch in Bar at Big Lagoon, 1920s.	J/A '64 p29
Hydraulic dredger used on Eastshore Fwy. fill (Alameda Co.)	
Levee on Bay Farm Island, trestle for dredger pipe.	J/F '48 p36
Damon Slough, completion of first link of hydraulic fill.	J/F '48 p37
Elmhurst Creek, outlet of dredger pipe.	J/F '48 p38
Hydraulic structure model as constructed for first trials.	N/D '44p16
Same structure dimensions as in Fig 1.	N/D '44p16
Final revision of model on which design of prototype was based.	N/D '44p16
Same dissipating basin dimensions as Fig. 3.	N/D '44p16
Intercepting ditches.	J/F '50 p38
Cut brush placed in eroded drainage ditch arrests active erosion.	J/F '50 p39
Intercepting drain ditches at top of slope in need of vegetation protection.	May '42 p10
I-5 drainage canal, Mendota	
Aerial view of prototype test canal south of Mendota.	M/A '66 p41
Failure of earth-lined section in noncompacted portion of prototype test canal.	M/A '66 p41
Failure of concrete lining and embankment in noncompacted portion after inundation of prototype test canal for 90 days.	M/A '66 p41
Poorly installed down drain.	May '42 p10
Property adjacent to eroded highway drainage ditch affected by debris.	N/D '49 p39
Reclamation district drainage canal passing under Sherman Dr. overcrossing on Salinas Fwy., Monterey Co.	M/A '54 p38
Sacramento freeway network, area served by drainage system	J/A '65 p26
Grating in place for deck drain on I-80 viaduct, Sacramento.	J/A '65 p23
San Bernardino Co.	
Bell Mt. Wash Br. drainage facility on Victorville-Bartstow Fwy. (I-15).	S/O '58 p45
San Diego Fwy. near Mulholland Dr. drainage facility under construction.	J/F '62 p49
Sand drains used for soil stabilization.	S/O '61 p74
Sand volume test used in checking compaction qualities on a highway construction project.	N/D '60 p24
Santa Clara Co., Rt. 17	
Portion of huge drainage system for new road.	Jun '38 p5
Drain being laid under subgrade.	Apr '37 p3
Excavation in rock formation for installation of side drainage.	Apr '37 p3
Extensive deep trenching for rock filling in drainage system made necessary to insure stability of big fill on realignment in Santa Cruz Mts.	O '38 p4
Siskiyou Co.	
Typical horizontal drain installation.	J/A '60 p18
Typical bin wall used along Sacramento Rvr. Canyon section of freeway.	J/A '60 p18
Typical stabilization trench.	J/A '60 p19
Spillway checks built in channel bottom for I-5 freeway project.	J/F '65 p39
Storm drain construction (San Diego Co.).	M/J '53 p13

# **EROSION CONTROL, Continued**

## **Embankment Stabilization**

- Combination drill rig during exploration of foundation for proposed heavy embankment. M/A '49 p60
- Drill rig making foundation borings for proposed 120-ft. high embankment. M/A '49 p60
- Ridgewood grade (US 101, Mendocino Co.) settlement platform. N/D '53 p11
- Slab trench showing pipe in place. N/D '53 p10
- Slope stabilization using tie-down method (Rt. 24, Contra Costa Co.). M/J '60 p30

Highly erosive soil near Salinas. N/D '49 p37

## **Jetties**

- Alamitos Bay jetty. S/O '44 p14
- West jetty of San Gabriel River, Alamitos Bay jetty in distance. S/O '44 p16
- Jetty installation just upstream from Shively Bluff, Humboldt Co. N/D '45 p21
- Permeable pile jetties built in 1944 at Dyerville. N/D '45 p23
- Sonoma Co.; part of old jetty remaining at mouth of Russian River. O '40 p23
- Waves destroying construction of trestle; River mouth almost closed by sand. O '40 p23
- Rock and concrete jetty at Jenner keeps open Russian River channel to ocean. S '41 p17

## **San Bernadino Co.; erosion control on City Creek Rd.**

- Grain and Baccharis six months after planting. S/O '48 p32+
- Growth made by Baccharis viminea four months after planting as cuttings. M/A '50 p37

## **Storm damage and**

- Army cots in place prior to placing a course of chicken wire followed by succeeding layers of embankment. J/F '50 p46
- Damage on fill slope seeded to barley. N/D '49 p41
- Exposed edges of horizontal mats proves value of straw cover as secondary protection; After the storm the contractor threw up a temporary dikes. J/F '50 p46
- Fill that suffered minor gullyng stopped by horizontal mats. J/F '50 p4
- Heavy rain was absorbed by the straw-protected surface until it became semi-liquid and flowed in streaks, or slipped in mass, down the slopes. J/F '50 p48
- Protected slopes properly dyked on top showed no failure after storm. J/F '50 p46
- Vegetative cover taking over on a 1 1/2 year-old fill J/F '50 p46
- Vegetative erosion protection a year and a half after planting. S/O '48 p32
- Vegetative erosion protection, five months old. S/O '48 p32

## **Slides & Slipouts**

- Contra Costa Co., Rt. 24; Orinda slide area, aerial view. J/F '52 p45
  - Drain at roadway level installed at Orinda slide location. J/F '52 p50
  - Slide after excavation. J/F '52 p51
  - Drains connected to collecting pipe in interceptor trench. J/F '52 p52
  - Collecting pipe and drains on lower bench. J/F '52 p52
  - Hazard and extent of typical slipout. Jul '41 p10
  - Large slipout [location unknown]. M/A '49 p62
- ## **Los Angeles Co.**
- Grapevine Canyon (I-5) [US 99, Rt. 4]
  - Proposed fill construction and highway widening. F '41 p19
  - Cracked and sliding hillside; Truck units pulling around slide. F '41 p19
  - Hydrauger in drilling position at Grapevine slide. J/F '48 p7

## EROSION CONTROL, Continued

Pacific Palisades, Santa Monica	
Completed section of slide prevention work near Santa Monica where retaining wall prevents slides from blocking Coast Hwy.	May '40 p13
Clearing summit of palisades of dangerous slide material.	May '40 p14
Landslide along Pacific Palisades.	J/F '57 p56
Slide area of Pacific Palisades near Santa Monica, 1940.	J/A '60 p54
Slide in progress south of Topanga.	Jul '41 p10
Slipout on Ridge Route Alt., I-5 [US 99].	Jul '41 p3
Mendocino Co.; rock slide in road near Leggett, 1948.	J/A '64 p24
Bulldozer attempting to clear slide which blocked Long Valley Cr. and caused flooding on US 101 in Mendocino Co.	N/D '61 p25
Monterey Co.; Lucia slide area, Rt. 1; Re-establishing road at base of slide.	N/D '52 p56
Placer Co.; slide on I-80 [US 40] near Baxter.	N/D '60 p19
Road closed by slide occurring during construction.	M/A '49 p64
San Bernardino Co.	
Drilling slide at Camp Cajon with hydrauger.	J/F '48 p9
Slipout prevention with iron pipe stakes and fencing.	N/D '49 p39
San Diego Co.; slide area on US 101 near Encinitas.	M/J '60 p31
Emergency bulkheading installed by state maintenance forces prior to undertaking erosion control operations.	M/J '60 p32
San Luis Obispo Co.; two units drilling at Cuesta Grade.	J/F '48 p8
Santa Clara Co., Rt. 17 (Los Gatos-Santa Cruz Hwy.)	
Large slipout of fill and installation of extensive drainage system.	D '41 p5
Last stages of fill restoration at slipout on new highway.	D '41 p3
Outlets of 2-in. perforated pipe drains.	D '41 p5
Repair of slipout at junction of old and new highways near Santa Cruz.	D '41 p4
Typical 2-in drains with 6-in. collection pipes.	D '41 p6
Siskiyou Co. (I-5) [US 99]	
Slide removal operations near Panorama Undercrossing.	J/A '60 p15
Slide removal operation on Castella section adjacent to "Big Fill" area.	J/A '60 p17
Clearing operation on slide at Castle Creek.	J/A '60 p17
Typical slide conditions encountered in Sacramento Rvr. Canyon.	J/A '60 p18
Sonoma Co.	
Flow from horizontal drain in Cloverdale slide.	J/F '48 p10
Slide which closed Rt. 1 between Jenner and Ft. Ross, aerial view.	M/J '54 p16
Fort Ross, and Coast Hwy. leading to Jenner.	M/J '54 p17
Rugged terrain between Jenner and Ft. Ross.	M/J '54 p17
Volume and force developed by circular type slide, such as this at Kellogg Hills.	Jul '41 p2
<b>Slope cuts and fills, erosion control and</b>	
Active erosion on steep cut slopes.	J/F '50 p34
Blanketing a sandy slope with top soil spread from above with tractor equipment.	Aug '39 p19
Board-faced, undrained terraces on a cut slope, subject to undermining.	J/F '50 p35
Brush layer in place ready for a covering of soil, which is then compacted.	J/F '50 p36
Brush placed in gullies before backfill material is spread on slope face.	J/A '50 p37
Cut slopes blanketed with 6 inches of top soil.	S '41 p14
Cut slopes stabilized with top soil, rye grass and straw.	May '42 p11
Cut slopes with transition at ends of cuts and protected with top soil.	S '41 p14
Damage caused by runoff water from adjacent property.	M/A '50 p41
Dicing cut slope prior to spreading top soil.	J/A '44 p7
Erosion caused by high-intensity storm during construction on untreated cut slope near Watsonville; Successfully stabilized cut slopes one year later.	N/D '49 p36
Erosion gullies formed on a top soiled cut slope.	May '42 p8



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**EROSION CONTROL, Continued**

Extensive cut and fill area exposed to erosive forces by construction of high standard mountain road (Santa Barbara Co.).	N/D '49 p39
Failure of side of main fill on Rt. 37 [Rt. 48], Solano Co.	S/O '61 p77
Fill slopes composed of disintegrated granite material after high-intensity rains.	N/D '49 p38
Fill slope protected by wattle method.	May '42 p9
Gravel slope on which erosion was prevented by top soil cover damaged by pedestrians climbing up and down.	S '41 p14
Ground cover plantings, unsatisfactory protection when planted on sterile slopes.	S '41 p14
Gullies formed in a topsoiled slope by successive rains.	M/A '50 p40
Gullies on topsoil cut slope caused by runoff from adjacent property.	M/J '50 p34
Hard, gullied disintegrated granite fill slopes.	J/A '50 p34
Horizontal drains being installed to complete stabilization treatment of large cut.	M/A '49 p61
Ice plant protecting this previously badly eroded slope in Solomon Canyon.	Aug '39 p18
Loss of top soil caused by first rain.	May '42 p9
Lumps or granular particles can not be expected to stick smooth surface.	S '41 p15
Nature's way of completely stabilized slope.	J/A '50 p39
New cut slopes on Arroyo Seco Pkwy. are seeded immediately to get a coverage protection against erosion by early rains.	Aug '39 p18
Oiling, an artificial means of erosion control.	S '41 p14
One rain, the first of the season, produced this extensive bank erosion.	Aug '39 p18
Planting and cultivating extensive right-of-way with ice plant to prevent erosion.	Aug '39 p17
Protective cover produced on sandy slope by seeded, thin top soil blanket.	Aug '39 p19
Raking top soil down cut; Raking top soil down unconsolidated sand cut.	D '42 p3
Result of 3 days rain on newly treated slopes.	May '42 p8
Reworking fill slope face with bulldozer and installing brush layers.	J/A '50 p37
<b>San Diego Co.</b>	
Eroded, untreated excavation slope near Carlsbad.	M/J '52 p22
Oceanside slope after clean-up, restoration, and treatment.	M/J '52 p23
Protected bank near Carlsbad withstood Jan. 18 storm with-out damage.	M/J '52 p24
Soil loss on grounded slope above old road at Oceanside after Jan 18 storm.	M/J '52 p23
Soil loss on recently topsoiled slope at Oceanside, after storm.	M/J '52 p22
Sandy cut slope near stabilized with spray of asphalt.	J/F '50 p34
Sandy, erodible slope left in good condition to retain top soil protection cover.	S '41 p14
Small gullies caused by runoff water from the pavement.	J/F '50 p37
Soil loss after a high-intensity storm on an un-treated fill slope.	J/F '50 p36
Stages of erosion prevention work on cut slope untreated slope after rain.	J/A '44 p7
Thick uncompacted topsoil blanket slips from slope when saturated.	J/F '50 p35
Typical erosion on slope cuts during construction.	May '42 p11
Unsuccessful barriers to retard the flow of water.	May '42 p10
<b>Stabilization</b>	
Type A stabilization during construction of 7th St. interchange, Santa Ana Fwy.	M/J '50 p34
Established ground cover planting on Type A stabilized cut slopes.	M/J '50 p34
Type B stabilization treatment ready for ground cover planting.	M/J '50 p36
Well roughened cut slope ready to be topsoiled.	M/J '50 p36
Spreading and smoothing topsoil on a roughened slope.	M/J '50 p36
Spreading straw on newly topsoiled slope.	M/J '50 p37
Brush layers and wire reinforced brush mats installed in a fill during construction.	M/J '50 p37
Spreading straw and rolling cut slope with cable-controller sheepsfoot roller.	M/J '50 p37
Rolling 10-ft. strip of fill slope after application of straw.	M/J '50 p38
Surface slippage due to saturation.	M/J '50 p40
Sections from which topsoil has slipped where repaired with fertilizer, seed, and straw successfully stabilized.	M/J '50 p40



## **EROSION CONTROL, Continued**

### **Straw as erosion control**

Close-up of strawing operation.	D '42 p2
Planting ice plant cuttings through straw along top and bottom of slope.	J/A '44 p8
Punching straw with sheepsfoot roller cabled between two tractors.	J/A '44 p8
Race track where straw is acquired; Loading straw at stables.	S/O '48 p31
Roller drawn up and down slopes incorporates straw in embankment surface.	J/F '50 p47
Rolling first application of straw with truck crane and tamping roller.	S/O '48 p31
Rolling straw-covered slope with a sheepsfoot roller.	J/F '50 p36
Rye grass and barley crop growing through straw mulch.	J/A '44 p8
Seed being sowed on fill slope before straw is applied.	D '42 p2
Spreading straw over top soiled slope to provide a mulch.	J/A '44 p7
Straw-covered, topsoiled cut slope after compaction with a sheepsfoot roller.	J/F '50 p35

### **Vegetation as erosion control**

Barley and weeds growing on stabilized slope.	M/A '50 p35
Eroded slopes covered with natural vegetation in Humboldt Co.	N/D '49 p38
Naturally stabilized slope.	N/D '49 p38
Planting small Eucalyptus rostrata in plant band.	M/A '50 p37
Growth obtained 28 months after planting (Riverside Co.).	M/A '50 p37
Un-vegetative drainage ditch, a potential threat to roadway.	J/F '50 p37
Vegetative protection in a dividing strip on an approximate 5% grade.	J/F '50 p37
Well-vegetated cut slope (Santa Cruz Co.).	M/A '50 p36
Willows planted in moist areas assist in stabilization (Santa Cruz Co.).	M/A '50 p36
Water erosion, various protective services against.	J/A '61 p70

### **Wind erosion**

Wind erosion affects both the sandy cut slope and the traveled way.	M/A '50 p34
Rock placed on sandy cut slope-face controls wind erosion in desert area.	M/A '50 p34
Sandy slope completely stabilized with cut brush and European beach grass.	M/A '50 p35
European beach grass interplanted with Italian Ryegrass controls wind erosion on sandy slope.	M/A '50 p35

## **EVENTS**

### **AASHO annual meetings**

#### **32nd annual**

L.A. Mayor Fletcher Bowron welcoming delegates.	Jan '47 p2
Retiring president M. J. Hoffman and Thomas H. MacDonald (CHC).	Jan '47 p3
Director of PW C.H. Purcell extending greetings from Gov. Warren.	Jan '47 p4
Newly elected officers of AASHO, 1946.	Jan '47 p14
Retiring president Hoffman presenting gavel to his successor.	Jan '47 p15
Business session of AASHO meeting.	Jan '47 p17
Engineer Geo. T. McCoy presenting M. J. Hoffman with gold watch.	Jan '47 p23
Delegates from Puerto Rico and Hawaii.	Jan '47 p24
Radio communication exhibit room, California Division of Hwys.	Jan '47 p21
Fred F. Grumm using equipment at radio communication headquarters.	Jan '47 p30
AASHO Women's Committee and Entertainment Committee, 1946.	Jan '47 p15
Delegates at 32nd annual meeting of AASHO.	Jan '47 C, BC
Retiring president Carl W. Brown presenting award of merit to Fred J. Grumm.	N/D '49 p45
44th annual; T.F. Bagshaw welcoming delegates.	J/F '59 p20
Delegates touring newly opened Carquinez Br.; Opening session.	J/F '59 p20

#### **California State Fair promotions.**

Aug '40 p25; Aug '41 p21;  
 J/A '47 p17; J/A '49 p35; J/A '50 p25; J/A '51 p28; J/A '52 p52;  
 J/A '53 p25; J/A '54 p35; J/A '55 p43; J/A '56 p69; J/A '57 p39

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**EVENTS, Continued**

**Festival of Arts (Laguna Beach)**

Irvine Bowl open air theater at Laguna Beach during Pageant of Masters.	S/O '52 p8
Live models pose for reproductions of Da Vinci's "The Last Supper"	S/O '52 p9
Artists pose for "Shepherds of Arcadia," by Nicolas Poussin.	S/O '52 p9
Models faithfully bring to life "Marcellus and the Princess by Dean Cornwell.	S/O '52 p10
Artists as "Lot and his Family leaving Sodom" by Rubens.	S/O '52 p11
Gem and Mineral Show, exhibits at.	N/D '53 P43
Sacramento Mineral Society presenting Gov. Knight with gem from show.	N/D '53 p43
Golden Gate International Exposition (Worlds Fair), Treasure Island	
Autos waiting for the gates to open early on first day of exposition.	Jun '41 p21
Aerial view of Treasure Island.	Jun '40 C, p21
Approaching fair buildings from state-built ramp approach.	Jun '40 p21
Governor's Conference on California 's Urban Area and the State Highway System.	M/A '60 p2
Grand National Livestock Expo (Cow Palace, S.F.)	
Coraleen Jurian, former queen of Grand National Livestock Expo, pointing to remodeled "Cow Palace" lettering.	S/O '53 p37
Cowboy star Rex Allen and his horse Koko.	S/O '54 p42
Members of the "Riders of the Andes" Chilean equestrian team.	S/O '55 p32
Interior of Cow Palace during performance of horse show and rodeo.	J/A '52 p48
Group of Royal Canadian Mounted Police.	J/A '52 p49
Western Trail Riders rehearsing for a performance.	S/O '53 p37
Highway Communications meeting delegates.	J/A '65 p47
Highway Transportation Congress in Washington DC, speakers' panel.	M/J '54 p19
International Road Congress (Mazatlan Mexico).	
Deputy Director of PW Edward J. Neron at Speakers Table.	Apr '37 p25
ITTE 17th annual Streets and Highways Conference participants.	M/A '65 p54
Los Angeles Co. Fair (Pomona)	
Aerial view of 450-acre exposition park.	J/A '56 p38
Sight-seeing train and grandstand on main promenade of L.A. Co. Fair.	J/A '56 p38
National Boy Scout Jamboree, Boy Scouts assembling for arena show.	S/O '53 p39
National Highway Users Conference	
Roy Johnson, Engineering Council, and Joseph E. Havenner, Auto Club of So. California, Chairman of Conference.	M/A '52 p37
Pike Johnson, President of Auto. Safety Foundation, and Dean L. Boelter, College of Engineering, UCLA.	M/A '52 p38
R.A. Moyer, Research Engineer ITTE, UC, and Earl Withycombe.	M/A '52 p39
National Highway Week	
Luncheon-meeting, 1962.	M/J '62 i.cvr.
Busses and cars used to transport tour participants.	M/J '62 i.cvr.
Dist. 8 design engineer Carlos Apablaza being interviewed by Spanish television station during National Hwy. Week.	J/A '63 p43
Olympics, Winter 1960	M/A '60 i.cvr
Traffic moving from Rt. 89 into Squaw Valley during Olympics.	M/A '60 i.cvr.
Navy roller towed by small tractor at compacted-snow access road.	M/A '60 p35
Parking lot at Squaw Valley.	M/A '60 p36+
Main Olympic Games area.	M/A '60 p38
Redwood Empire Assoc. annual convention	
Newly elected 1956-57 Executive Board of Redwood Empire Assoc.	N/D '56 p21
President and retiring president of Redwood Empire Assoc.	N/D '56 p21
Safety Engineers Conference delegates.	S/O '65 p54

## EVENTS, Continued

### Visitors to State

Brazil; Brazilian engineers looking over model of a structure during visit.	J/F '65 p62
Brazil's PW Secretary	J/A '56 p65
Canada; Members of Parliament, Ontario on visit to Headquarters.	M/J '61 p22
France; French engineers at Santa Monica-San Diego Fwy. interchange.	J/F '65 p62
German construction delegation and guides on tour of L.A. freeways.	M/A '57 p49
Great Britain; Director of Road Research on visit to U.S., 1961.	S/O '61 p69
British Minister of Transport with E. T. Telford.	M/A '60 p65
British municipal traffic engineers on bus tour of L.A. freeways.	J/A '60 p68
Minister of Transport on visit to California.	M/J '64 p64
India; Engineer from Jamshedpur with E. T. Telford.	J/F '60 p57
Japan; Japanese bridge engineers on tour of L.A. district.	S/O '59 p50
Japanese engineers and highway officials on visit to Headquarters office.	M/J '65 p63
Japanese engineers and officials on visit to Four-level structure, L. A.	J/F '60 p58
Japanese officials with Asst. Chief Right-of-way Agent E.M. McDonald.	S/O '58 p34
Philippines; Philippine civil engineer with Deputy State Engineer C.E. Waite.	J/A '60 p68
South America; Concul General of Nicaragua, former president of Costa Rica, and Consul General of Costa Rica.	N '40 p11
Switzerland; Swiss engineer viewing map of the L.A. Freeway System.	J/F '60 p57
U.S. House PW Committee	N/D '57 p3; J/F '62 p2

### WASHO (Western State Highway Officials) conventions

Delegates at annual meeting, 1939.	Apr '39 p15
30th annual meeting	
Gov. Warren congratulating convention manager George S. Pingry.	J/A '51 p42
Delegates assembled for first day's session.	J/A '51 p32+
WASHO president Anderson and family.	J/A '51 p34
Gov. Warren, US Commissioner. of Roads McDonald, and C.H. Purcell.	J/A '51 p35
Gov. Warren addressing WASHO convention.	J/A '51 p36
Hal H. Hale, Secretary of AASHO.	J/A '51 p38
A.M. Nash, WASHO Vice President.	J/A '51 p46
Newly elected WASHO officers, group photo.	J/A '51 p53
43rd annual; delegates at opening general session.	J/A '64 p18
Past president W. Otis Wright swearing in new officers.	J/A '64 p20
Western Regional Conference on Increasing Hwy. Engineering Productivity.	M/A '57 p35
World's Fair 1939-40--See <i>Golden Gate International Exposition</i>	

## FERRIES

Cache Slough Ferry.	S/O '45 p26; M/J '52 p13
New Ferry in operation midstream.	S/O '45 p26
Carquinez ferry serving Benicia-Martinez traffic.	M/J '60 i.cvr.
The ferry "Carquinez" making one of its last runs across Carquinez strait.	S/O '62 p5
Coronado Ferry, San Diego skyline and.	M/J '66 p20
Navy's North Island as seen from Coronado Ferry landing.	M/J '66 p20
Dungan's Ferry across lower Eel Rvr. between Ferndale and Loleta, ca. 1855.	M/J '64 p7
Gualala River cable ferry, ca. 1890-1894.	M/A '59 p19
Klamath River Ferry at Requa, 1925.	J/A '64 p31
Martinez-Benicia Ferry authorized by Legislature to be transferred to cities.	D '40 p13
Real McCoy ferry operating with cable before conversion to free-running.	J/F '64 i. cvr.
Real McCoy ferry converted to diesel power.	J/F '64 i. cvr.
Richmond-San Rafael Ferry; Commuter watching disappearing ferry on its last run.	S/O '56 p13
San Francisco Ferry House, ca. 1890.	M/J '64 p7
Sausalito Ferry Landing ca. 1890 with N. Pacific Coast Railroad ready to pull out.	M/J '64 p8

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

# FLOODING

## Bridges, flood damage to

- 1937; damage caused by unprecedented torrential rain storms  
 Undermined bridge near Dales on Red Bluff-Susanville Hwy., Rt. 36. Jan '38 p14  
 Washed-out abutment of Joseph Creek Br. at Alturas-Lakeview Rd., US 395. Jan '38 p14  
 Yellow Creek Br. on Rt. 70 [Feather River Hwy.] at Belden Jan '38 p15
- 1938; Southern California**  
 Big Creek Br. on Rt. 1 [San Simeon-Carmel Hwy.], Monterey Co. showing collapsed falsework of one arch on partially completed structure. Apr '38 p10  
 Big Tujunga Br., Los Angeles Co. damaged by flood. Apr '38 p14  
 Bridge over Santa Ana River on US 101, under normal and flood conditions. Apr. '38 p3  
 Castaic Creek Br., Los Angeles Co. damaged by flood. Apr '38 p14  
 Cujama Br. east of Santa Maria damaged by flood. Apr '38 p14  
 High waters in Barton Wash damage bridge on Rt. 19 [Rt. 168-C], L.A. Co. Apr. '38 p2  
 San Antonio Creek Br., Ventura Co. damaged by flood. Apr '38 p14  
 Santa Ana River Br. east of Colton damaged by flood. Apr '38 p14  
 Santa Ana River Br. in Newport damaged by flood. Apr '38 p15  
 Santa Ana River Br. in Santa Ana Canyon damaged by flood. Apr '38 p14  
 Santa Ana River Br. in Santa Ana damaged by flood. Apr '38 p14  
 Santa Ana River Br. near Olive, Orange Co. damaged by flood. Apr '38 p15  
 Santa Clara River Br. near Fillmore. damaged by flood. Apr '38 p14  
 Santa Clara River Br., Ventura Co. damaged by flood. Apr '38 p15  
 Sespe Creek Br. east of Fillmore damaged by flood. Apr '38 p15  
 Ventura Co. bridge Rt. 118 [Rt. 9] near Fillmore washed away. Apr '38 p12  
 Verdugo Creek Br. on Rt. 61, L.A. Co. before/after flood. Apr '38 p13  
 Wreckage of bridge across Santa Ana Rvr., Orange Co. Apr '38 p14  
 1939; Approaches to bridge washed away by desert torrents on US 60. O '39 p19
- 1940; Northern California**  
 Approach to bridge near Redding on I-5 [US 99] undermined by flood waters. Apr '40 p7  
 Damaged bridge on Rt. 32, Tehama Co. Apr '40 p6  
 Flood damaged highway bridge across Trinity Rr. near Douglas City. Apr '40 p23  
 Wrecked dredger washed against bridge piers. Apr '40 p23  
 Ruins of bridge deck carried downstream 1000-ft. Apr '40 p5  
 Site of Big Butte Creek Overflow Br. between Butte City and Biggs. Apr '40 p5  
 Stephens concrete bridge, a county structure wrecked by flood waters. Mar '40 p5  
 Surface, embankment wash-out at bridge approach near Butte City, Glenn Co. Apr '40 p6  
 Washed out section of Greenwood Creek Br., Rt. 1, Mendocino Co. Apr '40 p7  
 Washed out trestle approach to Scotia Br. across Eel Rr. on US 101. Apr '40 p6  
 Wreckage of former county bridge on Sacramento Rvr. at Redding, Rt. 44. Mar '40 p6  
 East approach to county bridge swept away by turbulent waters. Apr '40 p7
- 1941**  
 Cholame Creek Br. on Rt. 33 closed by undermining of pier. Apr '41 p12  
 Cottonwood Creek Br. (Rt. 36 [Rt. 29], Tehama Co.), section of washed out. Apr '41 p13
- 1942; Portion of railroad bridge span damaged by break of Feather River levee.** Mar '42 p4
- 1943; Southern California**  
 Approach to Castaic Cr. Bridge on US 99, Los Angeles Co. washed out. M/J '43 p13  
 Lane of approach to Santa Clara River Br. on Rt. 14 [US 6] damaged. M/J '43 p13
- 1945; San Felipe Br., Imperial Co.**  
 Washed out section after flooding subsided. S/O '45 p22  
 Washout seen from upstream side showing debris accumulated on pile bents. S/O '45 p22
- 1950; Destroyed Paradise overflow bridge on US 50 west of Mossdale.** J/F '51 p30  
 Aerial close-up of damage to bridge. J/F '51 p30
- 1953; Washed out bridge at Gilbert Creek just south of Oregon state line.** M/A '53 p36

# **FLOODING Damage, Continued**

## **1955 flood**

Bailey Br., Rt. 299 at Douglas City Trinity Co.	J/F '56 p37
Emergency span being pushed across gap in Trinity River Br. at Douglas City, Rt. 299.	J/F '56 p39
Bear River Br. (temporary replacement).	J/A '56 p58
Bull Creek Br., debris left at site of.	J/A '56 p57
Constructing temporary bridge of redwood logs.	J/A '56 p57
Canyon Cr. Br. on Rt. 49 (Sierra Co.), erosion at.	J/F '56 p11
Chippis Creek Br. on Rt. 70 [US 40-Alt.] near Belden buried in silt and rock.	J/F '56 p38
Crane Cr. on Rt. 140 near El Portal, Mariposa Co.	J/F '56 p36
Eel Rvr. in Rt. 1 near Fernbridge, Humboldt Co.	J/F '56 p36
El Capitan Creek Br. n. of Santa Barbara (US 1010, debris at inlet end of.	J/F '56 p18
Home Creek Br. (temporary replacement).	J/A '56 p58
Hoopa Br. (Rt. 96, Trinity River), portion of washed 2,000 ft. downstream.	J/F '56 p3
Flood-demolished bridge.	J/F '56 p3
Bridge before/after destruction by flood.	J/F '56 p35
Kaweah River Br. on Rt. 201 [Rt. 131] near Lemon Cove, Tulare Co.	J/F '56 p36
Larrabee Creek Br., flood damage to.	J/A '56 p59
Repair work on bridge underway.	J/A '56 p59
Mad River Br. on US 101 near Arcata, Humboldt Co.	J/F '56 p37
Maple Hill Br. over S. Fork of Eel Rvr. J/A '56 p58	
Mill Creek Br., Carpojo Creek Br. on Rt. 1 near San Simeon.	J/F '56 p37
Middle Fork Feather River Br. on Rt. 89 near Blairsden, Plumas Co.	J/F '56 p37
Price Creek Br., reconstructed.	J/A '56 p58
San Carpojo Creek Br. near Cambria (Rt. 1, San Luis Obispo Co.)	J/F '56 p17+
Saratoga Creek Br. n. of Santa Clara, debris removed from entrance of.	J/F '56 p34
Scott River Br., Kidder Creek Br. on Rt. 3 [Rt. 82] at Ft. Jones, Siskiyou Co.	J/F '56 p36
Scott River Br. near Hamburg, Rt. 96., before/after demolition by flood.	J/F '56 p38
Smith Point Br. across S. Fork Eel Rvr. on US 101 near Garberville,	
flood damage repair work on.	M/A '56 p54
Trinity Rvr. Br. at Cedar Flat, Rt. 299, vital truss members battered by log.	J/F '56 p39
Uvas Creek Br. on Rt. 152 near Gilroy, Santa Clara Co.	J/F '56 p36
Yager Creek Br. on Rt. 36 at Carlotta, Humboldt Co.	J/F '56 p37

## **1964 Flood**

Aerial view of Rt. 49 bridge across American River near Auburn.	M/A '65 p12
Army Caribou plane flying over destroyed bridge on Rt. 299.	J/F '65 p13
Bailey Br. (Smith River, US 199)	
Clearing debris from.	M/A '65 p20
First girders being assembled.	M/A '65 p24
Temporarily repaired Bailey Br.	M/A '65 BC
Another Bailey Br. replacement on US 199 across Smith River.	M/A '65 p24
Bailey Br. temporary replacement at Gray Creek.	M/A '65 p29
Carrville Br. over Trinity Rvr., damage to (Trinity Co.).	J/F '65 p16
Cold Creek Br. on Rt. 20, Mendocino Co., washed out	J/F '65 p17
Debris under George M. Leatherwood Memorial Br. on US 101 near	
Dyerville, old span on Rt. 254 destroyed.	J/F '65 p4
Debris-logged concrete arch bridge on US 199 above Crescent City.	J/F '65 p5
Feather River Br. at Chester, Plumas Co., damage to.	J/F '65 p16
Fernbridge; Eel River Br. clearing debris from famous old concrete span.	M/A '65 p17
Forest Service Br. (Klamath Rvr. at Ishi Pishii, Humboldt-Siskiyou Co. line).	J/F '65 p16
Only abutment of same bridge remaining after flood.	J/F '65 p16
Gap across fallen N. Fork of Russian River Br. at Calpella.	J/F '65 p17

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**FLOODING Damage, Continued**

Klamath River Br.; traffic using temporarily repaired bridge.	M/A '65 p22
Logging truck crossing temporary log bridge which replaced collapsed Van Dozen Rvr span on Rt. 36 near Bridgeville.	M/A '65 p11
Lumber truck crossing temporary log bridge on Rt. 36 near Colotta.	M/A '65 p13
One of twin bridges on US 101 at S. Scotia destroyed by flood.	J/F '65 p3
Oregon Creek Br. near Camptonville (Yuba Co.), partly destroyed.	J/F '65 p17
Orleans Br.; temporary bridge under construction.	M/A '65 p2
Temporary low-level bridge across Klamath Rvr. at Orleans.	M/J '65 p46
Patricks Creek Br. (US 199)	
Front-end loader being used to put logs in place for temporary bridge.	M/A '65 p23
Finished bridge crossing Patricks Creek.	M/A '65 p23
Pier settlement on county bridge over S. Fork Cottonwood Cr. (Tehama Co.).	J/F '65 p17
Robinson Ferry (Paul Mudgett) Br. on US 101 near Rio Dell, damage to.	J/F '65 p2
Repairing Robinson Ferry Br.	M/A '65 p23
Repaired Robinson Ferry Br..	M/J '65 p47
Scotia-Rio Dell Br.	
North abutment torn out by force of Eel River.	J/F '65 p6
Temporary one-way bridge of wooden piles, beams, and planks built across break at north end of Scotia-Rio Dell Br.	M/A '65 p15
Sixth Army pontoon ferry crossing Klamath Rvr. at site of ruined bridge.	M/A '65 p22
Pontoon ferry landing with load of emergency utility repair vehicles.	M/A '65 p22
Somersbar replacement bridge under construction.	M/A '65 p12
Stephens Br. over Cache Creek, Yolo Co., damage to.	J/F '65 p17
Temporary footbridge under construction.	M/A '65 p15
Thomas Creek Br. on FAS Rt. 1078 near Paskenta, Tehama Co., damage to.	J/F '65 p17
Upper Eel River Br. on Covelo road (Mendocino Co.), debris and.	J/F '65 p16
"Warning: only authorized persons allowed to pass this point" sign placed at entrance to temporary footbridge over gap in span.	M/A '65 p15
Washed out bridge on US 101 at Klamath.	J/F '65 p6
Whittmore Br. on FAS Rt. 977 in Humboldt Co., damage to.	J/F '65 p16
Willow Creek Br., Rt. 96	
Aerial view of collapsed bridge, and emergency log span.	M/A '65 p2
Breeches buoy rigged at Willow Cr. to carry people across collapsed span.	M/A '65 p4
Collapsed bridge.	J/F '65 p17
Emergency log bridge over Willow Creek on Rt. 96.	M/A '65 p2
1966; Dist 6	
Bridge over Tule River on Rt. 190 east of Porterville, withstood storm.	J/F '67 p14
Crane removing debris backed up against Clear Creek Br., Rt. 178 in Kern Co.	J/F '67 p14
"During" and "after" views of N. Fork Tule River Br on Rt. 190 at Springville.	J/F '67 p16
Typical damage to bridge understructure.	J/F '67 p14
<b>Roads, flood damage to</b>	
1920s	
Flood damaged US 101 near Crescent City along Smith Rvr., 1920s.	J/A '64 p31
Flooded section near Humboldt-Del Norte Co. line, 1928.	J/A '64 p31
<b>1937; Damage caused by unprecedented torrential rain storms</b>	
Approach fill wash-out at Bear Creek south of Los Molinos, Rt. 99 [US 99E].	Jan '38 p15
Fill partially washed out along Trinity River west of Junction City, Rt. 299.	Ja '38 p14
Flood damage to Rt. 299 [Redding-Alturas Hwy.], Shasta Co. in 1937 storm.	F '40 p15
Flood waters on secondary road (San Diego-Jacumba) San Diego Co.	Mar '37 p15
Flooded Rt. 1 [Rt. 56] south of Eel River Br. at Fernbridge.	Jan '38 p14
Overflow channel formed through Main St., Chester.	Jan '38 p14
Pavement and shoulders washed away north of Oceanside, San Diego Co.	Mar '37 p13



# **FLOODING Damage, Continued**

Pavement damaged by flood water east of Hamilton City, Rt. 32.	Ja '38 p14
Rock slide damage to highway on I-8 [US 80] near Jacumba, San Diego Co.	Mar '37 p14
Ripped out section of highway near Foster, San Diego Co.	Mar '37 p14
Rt. 70 [Feather River Hwy.] covered by boulders at Butte-Plumas county line.	Ja '38 p14
San Jacinto River tearing down bank on Foothill Road, Riverside Co.	Mar '37 p15
Shoulders destroyed by ditch flood waters (Galivan-Irvine), Orange Co.	Mar '37 p14
Snow covered washout near Cisco on Donner Summit Rd., I-80 [US 40].	Jan '38 p14
Undermined pavement at culvert east of Tustin in Orange Co.	Mar '37 p15
Washout east of Ingot, Rt. 299.	Ja '38 p14
Washout near San Clemente, Orange Co.	Mar '37 p15
Washout of Three Flags Hwy. (US 395) south of Coleville (Mono Co.).	Jan '38 p14
Washout on Rt. 140 [Yosemite All-Year Hwy.], Mariposa Co.	Jan '38 p14
<b>1937/38; Sacramento Valley flooded</b>	
Break in levee along Sacramento Rvr. north of Colusa.	Jan '38 p17
Flooded farm lands south of Princeton and west of Sacramento Rvr.	Jan '38 p17
Flooded countryside north of Colusa.	Jan '38 p17
Levees saved	
Flood waters rage through orchard near Lone Pine Ave., Butte Co.	Mar '38 p2
Break in Sacramento River levee and inundated acres near Chico.	Mar '38 p3
Same, after levee closing operations had begun.	Mar '38 p3
Sacramento Rvr. flood waters pouring into Yolo By-pass through Sacramento weir, Feb. 11, 1938.	Mar '38 p27
<b>1938; Southern California</b>	
Autos stuck in silt on I-10 [Rt. 26] near Colton, San Bernadino Co.	Apr. '38 p5
Auto washed away in Big Tujunga Wash flood, Rt. 118 [Rt. 9] near Sunland.	Apr. '38 p5
Boulder deposited by flood on Topanga Canyon Rd. below Wildwood.	Apr. '38 p6
Damage to Newhall-Saugus Hwy. in Los Angeles Co.	Apr. '38 p4
Damage to Rt. 126 between Piru and L.A. Co. line in Ventura Co.	Apr. '38 p9
Damaged embankment and pavement on Ridge Route Alt. (I-5) [US 99].	Apr. '38 p4
Damaged portion of Rt. 27 [Rt. 156] in Los Angeles Co.	Apr. '38 p5
Embankment washed out together with half the Newhall-Saugus Hwy.	Apr. '38 p5
Flooding on E St., San Bernadino road leading to Orange Show Pavilion.	Apr. '38 p8
Firestone Blvd., L.A., cleared of silt due to overflow waters from Coyote Cr.	Apr. '38 p9
Highway construction in Orange Co. washed out by flood waters.	Apr. '38 p5
Highway dips washed out by Santa Maria River near Ramona.	Apr. '38 p13
House washed onto highway on E St. near city limits of San Bernadino.	Apr. '38 p25
I-5 [Leg Rt. 4, US 99] in Weldon Canyon partially destroyed by Gavin Creek.	Apr. '38 p5
Mud cleared from highway near east city limits of Colton, San Bernadino Co.	Apr. '38 p6
Portion of I-10 [Rt. 26] between Colton and Redlands washed away.	Apr. '38 p4
Rt. 1 (Coast Hwy.) undermined at mouth of Santa Monica Canyon.	Apr. '38 p5
Rt. 2 (Old National Trails Hwy., Rt. 66) washed out in Cajon Pass.	Apr. '38 p4
Shoulder wash-out, pavement undermined on I-10 [Rt. 26], San Bernadino.	Apr. '38 p4
Shoulders and pavement destroyed on Foothill Blvd.	Apr. '38 p4
Slide on I-5, Ridge Route. in L.A. Co. during storm.	F '40 p17
Slide on Rt. 1 [Coast Hwy.] north of Santa Monica, L.A. Co.	F '40 p17
Washed out section of Ridge Route Alt. (I-5) [US 99] in L.A. Co.	Apr. '38 p4
Washout north of Ojai on Rt. 33 [Ventura-Maricopa Hwy.], Ventura Co.	F '40 p15
Waterfall on Foothill Blvd. in San Bernadino Co. caused by flood waters.	Apr. '38 p1

## FLOODING Damage, Continued

### 1939; Damage to desert highways

Auto washed downstream off highway.	O '39 p8
Damage to roadways on Rt. 195 extending north from Blythe to Needles.	O '39 p7
Flooding on Jackson St. in Indio, Riverside Co. during storm.	O '39 p6
Long stretch of Rt. 60 carried away.	O '39 p8
State maintenance equipment marooned by flood.	O '39 p8

### 1940; Northern California

Flood damaged section of US 101 at Greenlaw Bluffs north of Dyerville.	Apr '40 p6
Highway shoulder cut away to pavement edge on Rt. 299, Trinity Co.	Apr '40 p6
Maintenance crews clearing slide on Rt. 1, Sonoma Co. near Jenner.	Apr '40 p7
Patties Cr. overflows Rt. 70 [Feather River Hwy., Rt. 24] in Butte Co.	Apr '40 p7
Rock slide blocking two lanes of Rt. 17 in Santa Cruz Co.	Apr '40 p6
Rock slide on Feather Rr. Hwy. east of Oroville.	Mar '40 p27
Rt. 15, flooded by a break at Meridan, in Sutter Co.	Mar '40 p5
Rt. 99 [US 99E] flooded near Biggs, Butte Co. Mar '40 p6	

### Sacramento River Valley

Food waters pouring through break in levee north of Colusa.	Mar '40 p1
Agricultural lands inundated by levee breaks north of Colusa.	Mar '40 p2
Cattle marooned on railroad tracks in flooded portion of Princeton.	Mar '40 p3
Gov. Olson visiting refugees housed at State Fair grounds after their evacuation from Yolo Co. lowlands by National Guardsmen.	Mar '40 p3
Levee break north of Colusa.	Mar '40 p5
Equipment repairing levee break along Sutter Bypass near Meridan.	Apr '40 p11
Debris washed up against Sutter Bypass levee.	Apr '40 p30
All that remained of several farm structures after February storms.	Apr '40 p30
Section of Rt. 113 [US 99] destroyed by flood in Solano Co.	Apr '40 p7
Slide area on Rt. 1, San Mateo Co.	Apr '40 p7
Slipout on Redwood Hwy. (US 101) north of Cloverdale.	Apr '40 p7
Slipout on Rt. 116 [Rt. 104] along Russian River near Guerneville.	Mar '40 p6
Street flooded and closed to traffic in Napa City, Napa Co.	Mar '40 p5
Washed-out riprap at end of sacked concrete protection on Rt. 16, Yolo Co.	Apr '40 p7
Washout on Rt. 9 [Rt. 42] in Santa Clara Co.	Apr '40 p6

### 1941

Fill settlement on Downieville road, Rt. 49 [Rt. 25], Nevada Co.	Apr '41 p13
Large slide on Rt. 16 [Rt. 50], Colusa Co.	Apr '41 p13
Section of highway carried away by flood waters through Topanga Canyon.	Mar '41 p2
Section of US 101 [Coast Rd.] in Santa Barbara Co. washed out by flood.	Mar '41 p2
Section of Rt. 299 between Redding and Weaverville in Shasta Co. ripped out by floodwaters.	Mar '41 p1
Slide and detour road on Rt. 2 [Rt. 61], Los Angeles Co.	Apr '41 p13
Slide of huge rocks on Rt. 33 [US 399; Rt. 138], Ventura Co. north of Ojai.	Apr '41 p12
Slides of mud and rock covering section of Rt. 1 [Rt. 56], Monterey Co.	Apr '41 p12
Slipout on Rt. 154 [Rt. 80, San Marcos Pass Hwy.], Santa Barbara Co.	Apr '41 p12
Slipout on I-80 [Rt. 14] between Carquinez Br. and Martinez.	Apr '41 p13
Torn out section of Rt. 79 [Rt. 194], Riverside Co.	Apr '41 p12
Washed out section of I-5 [US 99], Shasta Co.	Apr '41 p12
Washout on Hesperia road, San Bernadino Co.	Apr '41 p13
Washout on Rt. 20 [Tahoe-Ukiah Hwy.], Lake Co.	Apr '41 p12
Washout on Rt. 74 [Rt. 64, Capistrano-Elsinore road], Orange Co.	Apr '41 p13
Washout on Rt. 299 west of Redding.	Mar '41 p27
Washout on Topanga Canyon road, Rt. 27 [Rt. 156], Los Angeles Co.	Apr '41 p13
1942; Break in Feather River levee that flooded 32,000 acres of farmland.	Mar '42 p4



# **FLOODING Damage, Continued**

## **1943; Southern California**

- I-40 [US 66] blocked by flood debris near Gish, San Bernadino Co. M/J '43 p12
- Roadway between bridges washed out in San Gabriel Canyon. M/J '43 p13
- Rt. 18 washed out, temporary detour near Crestline, San Bernadino Co. M/J '43 p12
- Sacramento; 16th St. viaduct
- Flooding under viaduct. F '43 p15
- Tracks of Sacramento Northern and WP RRs. just escape submergence. F '43 p15
- Viaduct carrying traffic over flooded section of American River overflow. F '43 p15

## **1945; Mojave-Lone Pine area**

- Bus washed 1,000-ft from highway on US 395 [Rt. 23], Inyo Co. N/D '45 p24
- Mud and boulders over roadbed on Rt. 14 [Rt. 23], Kern Co. N/D '45 p24
- Shovel locating debris-covered roadway on Rt. [Rt. 23], Kern Co. N/D '45 p24
- Tractor removing deposit from roadway near Homestead, Rt. 14 [Rt. 23]. N/D '45 p25
- Bulldozer working to uncover roadbed on Rt. 23. N/D '45 p25
- Washed out section of Rt. 23. N/D '45 p25

## **1950**

- Clean up operations on I-80 [US 40] after a washout at Mystic. J/F '51 p31
- Flood damaged section of Rt. 49 between Downieville and Sierra City. J/F '51 p28
- Flood damage on Rt. 140 [Yosemite All-Year Hwy.] east of El Portal. J/F '51 p29
- Bulldozer equipped with Caterpillar diesel tractor at work on Rt. 140. J/F '51 p29
- Heavy equipment clearing US 50 at Camp Sacramento. J/F '51 p31
- Slide on Mt. Diablo Rd. (Rt. 24) [Rt. 75], Contra Costa Co. near Orinda. J/F '51 p31
- Washed out section of Rt. 178 in Kern Co. J/F '51 p33

## **1953; Northern California**

- Temporary detour under construction around washed out embankment near Eureka, US 101 (Redwood Hwy.). M/A '53 p35
- Washed out embankment near Blue Lake, Rt. 299. M/A '53 p36
- Washed out roadway near Trinidad on US 101 (Redwood Hwy.). M/A '53 p35

## **1955**

- Aerial view of Marysville at critical stage of flood on Dec. 23, 1955. J/F '56 p22
- Break in Feather River levee at Nicolaus, and south of Yuba City, Sutter Co. J/F '56 p21
- Crews working to save north levee of Natomas Cross Canal. J/F '56 p23

### **Dist 1**

- Bluffs washed out on US 101 along Eel Rvr. at Shively. J/F '56 p3
- Box culvert washed out on Rt. 1 near Ferndale. J/F '56 p5
- Buildings of Weott on US 101 wrecked by Eel River. J/F '56 p3, 5
- Damage to Rt. 1 between Fernbridge and Ferndale caused by Eel River. J/F '56 p5

### **Dist 2**

- Complete washout of riprap and highway near Vitzthum, Trinity Co. J/F '56 p10
- Highway entirely destroyed at Chipps Creek on Feather River. J/F '56 p7
- Slides and erosion east of Arch Rock Tunnel on Rt. 70 [US 40-Alt.]. J/F '56 p8
- Temporary detour under construction on Trinity Rvr. near Douglas City. J/F '56 p9
- Typical damage along Trinity River. J/F '56 p9

### **Dist. 4**

- Long washout on Rt. 9 west of Saratoga in Santa Clara Co. J/F '56 p12
- Rock slide west of Junction 56, Rt. 6 on Rt. 128, Napa Co. J/F '56 p12
- Slide blocking highway from Waterman Gap to Big Basin State Park. J/F '56 p12
- Slipout for full length of roadway, Rt. 128, Napa Co. J/F '56 p12
- Slipout on Rt. 35 [Rt. 5] south of La Honda, San Mateo Co. J/F '56 p12
- Washout on Niles Canyon Hwy., Alameda Co. J/F '56 p12
- Washout on Rt. 84 [Rt. 107], Alameda Co. J/F '56 p12

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**FLOODING Damage, Continued**

**Dist. 5**

- Flooded Visalia Airport interchange, Tulare Co. J/F '56 p14
- Flooded section of Rt. 99 through and south of Chowchilla, Madera Co. J/F '56 p15

**Dist. 6**

- Damage to roadway fill at east end of San Benito River Br. near Hollister, Rt. 156 [Rt. 22]. J/F '56 p17
- Damage to roadway south of Big Sur Rvr. at Redwood Canyon, Rt. 1. J/F '56 p16
- Damage to sacked concrete riprap near Jungle Inn Br. across San Benito Rvr. south of Hollister on Rt. 180 [Rt. 119], San Benito Co. J/F '56 p16
- Dist. 10; Flood damage in vicinity of El Portal. J/F '56 p19
- Embankment washed out by Trinity River on Rt. 84 south of Hoopa. J/F '56 p3
- Embankment washed out on US 101 near Dyerville. J/F '56 p3
- Erosion around Sutter Causeway on Rt. 70 [US 40-Alt], Sutter Co. J/F '56 p11
- Erosion of shoulders on Rt. 49 in Coloma, El Dorado Co. J/F '56 p11
- Feather River levee, which broke at Yuba City in 1955 flood. J/A '60 p56
- Fill slipout on Rt. 49 east of Nevada City. J/F '56 p11
- Fill slipout on US 50 east of Placerville, El Dorado Co. J/F '56 p11
- Flood conditions at Folsom Dam and Reservoir on Dec. 24, 1955. J/F '56 p20
- Houses wrecked by flooding in Pepperwood on US 101 J/F '56 p3, 9
- Major fill slipout on I-80 [US 40] west of Baxter, Placer Co. J/F '56 p11
- Masonry wall topped by high waters on Rt. 299 along Trinity River. J/F '56 p5
- Removing slide on US 101 near Piercy, Mendocino Co. M/A '56 p56
- Slides blocking US 101 at Dyerville on S. Fork of Eel River. J/F '56 p5
- Town of Klamath with Klamath River at flood stage. J/F '56 p20
- Yuba City on Dec. 24, 1955 indicating flooded maintenance shop. M/A '56 p59

1961; Long Valley Creek slide causes flooding

- Bulldozer clearing slide which blocked Long Valley Cr. J/F '56 p11
- Flooded section of US 101 near Willits. N/D '61 P26

**1964; Northern California**

- Air Force, Navy, and private aircraft at Arcata airport used to bring supplies to isolated areas and make countless rescue/reconnaissance missions. J/F '65 p13
- Before/after views of destruction and repair on US 101. M/A '65 p25
- Before/after views of damaged/repared US 199 in Smith River Canyon. M/A '65 p25
- Boulder which slid down mountainside onto Rt. 299. M/A '65 p6
- Cable carrier carrying people and supplies across Canyon Cr., Junction City. J/F '65 p13
- CHC and Director of PW John Erreca observing gap in US 101 near Rio Dell. M/A '65 p11
- CHC members during inspection flight to Humboldt Co. flood area. M/A '65 p9
- Congressional subcommittee of US House of Representatives PW Committee on tour of flood-ravaged areas. J/F '65 p14
- Convoy of evacuees working its way around detour on Rt. 299 at Junction City. M/A '65 p8
- Couple with sick child being evacuated by light helicopter. M/A '65 p5
- Damage and repair to US 101 at Squaw Cr. near Cummings (Mendocino Co.). M/A '65 i.cvr
- Damaged Humboldt Co. road. J/F '65 p17
- Debris deposited by flood on US 101 in redwood groves near Pepperwood. J/F '65 p3
- Destruction of culvert and road on Rt. 96. J/F '65 p12
- Earth deposited on tracks of railroad right-of-way near Alderpoint. J/F '65 p4
- Eel River in full flood at site of flood-destroyed town of Pepperwood. J/F '65 p3
- Engineers surveying damage on Humboldt Co. road. J/F '65 p11
- Flood damage at Mears Creek on I-5 [see J/F '65 p17] J/A '65 p44
- Flood victim employees receiving financial aid donated by other employees. M/J '65 p49
- Gap torn in US 101 at Cummings. J/F '65 p5
- Gaping washout of Rt. 208 in Mendocino Co. west of Leggett. J/F '65 p15

# **FLOODING Damage, Continued**

Gillis, Lyman R., being interviewed en route to flood area.	M/A '65 p9
Government equipment trapped on Rt. 96 due to slides and slipouts.	J/F '65 p12
Guerneville in Sonoma Co. while Russian Rvr. was in flood.	J/F '65 p15
Highway covered with gravel and debris from Hospital Cr. near Hoopa.	J/F '65 p12
I-80 at Yolo Bypass resembling causeway to Key West.	J/F '65 p10
Light backhoe clearing drain on Rt. 299.	M/A '65 p6
Logs and debris carried down by rivers and washed into Crescent City harbor.	J/F '65 p6
Marine helicopter landing on street of isolated Willow Creek.	J/F '65 p13
Operations center for rescue missions at Rohnerville Airport.	M/A '65 p5
Partially repaired Rt. 96 along Trinity-Klamath Rivers.	M/J '65 p47
Public utility crew restoring electrical power to flood-stricken Humboldt Co. on damaged section of US 101 between Alton and Fortuna.	J/F '65 i.cvr.
Red Cross girl helping schoolchildren at Klamath crossing.	M/A '65 p22
Roadblock sawhorse caught on power lines after floodwater receded at Weott.	J/F '65 p7
Signpost in Humboldt Co. indicating high water level during flood.	N/D '65 p5
Truck convoy on US 101 at Garberville waiting order to proceed.	M/A '65 p21
Two-lane piece of paving falling into gap in road.	J/F '65 p17
Typical damage to country road, Humboldt Co.	J/F '65 p11
US 101 near Pepperwood, with one damaged lane, the other in use.	M/A '65 p21
US 199 in Smith River Canyon completely washed away.	J/F '65 p7
Washout at Bluff Creek across Rt. 96 along Klamath River.	J/F '65 p11
Westbound army convoy on Rt. 299 at Pony Creek.	M/A '65 p8
1965	
Maintenance truck buried in mud on Rt. 111 near I-10 junction.	J/F '66 p31
Mangled remains of Snow Creek Br., which collapsed due to floodwaters.	J/F '66 p31
1966; Dist 6	
Damage to roadway caused by clogged culvert.	J/F '67 p14
Destroyed section of Rt. 180 in Kings River Canyon near park boundary.	J/F '67 p14
Section of Rt. 178 along Kern River near Bodfish with culvert failure, rock slide, water and debris on pavement.	J/F '67 p16
<b>Flood Control</b>	
Contra Costa Co.; Completed first stage of Walnut Creek channel relocation.	M/J '61 p77
Los Angeles Co.; Burbank-Western Storm Drain Channel	
Excavation of Burbank-Western Storm Drain Channel.	S/O '59 p11
Form work in place for bottom slab of storm drain channel.	S/O '59 p15
Reinforcing steel being placed in final position and checked.	S/O '59 p19
Merced Co., Rt. 99; divided highway solves flood problem	
New section of Rt. 99 showing elevation to escape flood waters.	Jul '39 p16
Merced highway showing difference in grade between new and old road.	Jul '39 p17
Modoc Co.	
Tule Lake Reservoir which was raised 6-ft. under emergency construction to prevent its destruction and consequent wiping out of West Valley Dam.	Jul '38 p23
Napa Cooperative Drainage Project near junction of collector channels at railroad trestle and double bridge under Rt. 29.	
Outfall channel as seen from frontage road on Rt. 29 near Napa.	M/A '61 p56
Beginning of Norton Slough channel change.	M/A '61 p59
Sacramento Co.; 16 <sup>th</sup> St. Subway flood gate	
Flood gate from river side showing aluminum sections in place.	O '37 p27
Storage compartment with door open, showing aluminum section as stacked when not in use.	O '37 p27
Rear view showing aluminum gate in place; Close-up of rear of flood gate.	O '37 p27
Conventional design of flood gate.	O '37 p27

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**FLOODING Control, Continued**

Santa Clara Co., Guadalupe River channel project	
Guadalupe River channel looking downstream.	M/J '61 p75
Improved Guadalupe River channel at Brokaw Rd. Br.	M/J '61 p75
Drop structure in river channel north of Brokaw Rd.	M/J '61 p75

**Flood damage repair**

Butte Slough Levee	
Break in Butte Slough Levee in Sutter Co. on March 1, 1940.	Jun '40 p12
Timber and sheet pile emergency overflow dam under construction.	Jun '40 p13
Bulkhead showing 3 drivers at work; Final closing of steel piling.	Jun '40 p13
Laborers wheeling cobbles for bottom protection in closure section.	Jun '40 p13
Bulkhead showing steel pilings; Drivers at work on structure; Wing levee.	Jun '40 p13
Emergency replacement and protection at washout on I-80 [US 40] near Truckee.	S/O '51 p31
Gov. Olson and officials view levee break north of Princeton.	Apr '40 p4
Mariposa Co.; Rt. 140 (Yosemite All-Year Hwy.)	
Typical flood damage to Rt. 140 caused by Merced River.	Mar '39 p6
Protective rock wall under construction on Yosemite All-Year Hwy.	Mar '39 p7
Rock wall flood protection being built on Yosemite All-Year Hwy.	Mar '39 p8
1955; Reconstruction and riprap along Trinity Rvr. near Vitzhums.	M/J '57 p58

**1964; Northern California**

Boom of backhoe being used as crane for lifting sections of culvert into place near Richardson Grove.	M/A '65 p19
Clearing minor slide on US 101 near Cummings.	M/A '65 p20
Crane removing logs washed up on undamaged section of county road.	M/A '65 p20
Development of Blue Slide Rd. detour on Redwood Hwy.	M/A '65 p16
Equipment removing silt from road in Orick.	M/A '65 p19
Front-end loader clearing small slide on Rt. 299.	M/A '65 p7
Front-end loaders providing truck with fill material for washed-out section.	M/A '65 p20
Grader clearing silt and debris off Redwood Hwy. near Fortuna.	M/A '65 p19
Highway engineers waiting to be flown by helicopter for road repair job.	M/A '65 p6
Highway worker clearing mud-filled road with hand shovel.	M/A '65 p26
Partly rebuilt section of Rt. 199 in Smith River Canyon.	M/A '65 p21
Portable drill rig making holes for charges to widen Rt. 299 roadway.	M/A '65 p6
Rebuilding US 101 along lower Eel River.	M/A '65 p14
Rebuilt section of Rt. 299 near Willow Cr.	M/A '65 p13
Reconstructed Rt. 36 in Van Duzen Rvr Canyon.	M/A '65 p13
Repairing slipout.	M/A '65 p19
Rock truck used to replace road base.	M/A '65 p19
Tractor and blade clearing debris from stream bed.	M/A '65 p6
Tractor clearing section of road.	M/A '65 p7
Tractor towing public utilities repair truck around slipout.	M/A '65 p21
Workers from various agencies clearing flooded Rt. 36 at Alton.	M/A '65 p4

**FREEWAYS--See also ROUTES**

**Airspace--under & over freeways**

Elevated freeway structure with parking beneath it.	N/D '66 p22
Members of Senate Fact Finding Committee on Transportation and Public Utilities which considered the problem of freeway airspace.	S/O '65 p3
Model illustrating some of the uses of freeway airspace under consideration.	S/O '65 p4
Model of freeway-spanning restaurant and heliport.	N/D '66 p31
Model of possible development above a depressed freeway in Los Angeles.	S/O '65 p5
Sunnyvale's former greyhound bus station, housed in a mobile-home.	S/O '66 p43
New greyhound bus station under Mathilda Ave. overhead on Rt. 85.	S/O '66 p43

## **FREEWAYS, Continued**

Full freeway, expressway, and two-lane highway, examples of.  
 Members of special AASHO freeway committee.

N/D '60 p11  
 J/F '60 p66

### **Public hearings**

CHC and audience at freeway routing public meetings held Jan. 20, 1956  
 and July 14, 1955 at Chico State College Auditorium.

J/F '56 p43

CHC at public freeway route hearing.

J/F '66 p4

Citizens at public meeting involving a routing discussion in Stockton.

N/D '58 p3

Dist. 1 Engineer A.S. Hart conducts public meeting on freeway routing  
 proposals in Ukiah Co. courthouse, Jan. 17, 1956.

J/F '56 p42

Engineers and citizens view maps at pre-public hearing, Dist. 4.

N/D '64 p41

Freeway routing hearing in progress in Sacramento.

N/D '61 p47

Harrison Baker (CHC) points out a freeway location on map.

S/O '59 p5

Local citizens at public discussion of freeway routings.

J/F '58 p31

Public discussion of freeway routes in Los Banos.

J/F '59 p53

## **GRADE SEPARATIONS & INTERCHANGES**

### **Interchanges, models of**

Aerial contour map of area stretched over styrofoam base.

M/J '65 p53

Base for models using styrofoam framed with wood.

M/J '65 p53

Constructing model roadways using plastic strips with T-pegs for support.

M/J '65 p54+

Construction using wooden pegs.

M/J '65 p56

"Crestline Interchange" model on display at Ontario Int'l Airport.

J/A '63 p43

Drawing of interchange between two freeways prepared for study purposes.

N/D '66 p22

Shaping styrofoam to desired contours.

M/J '65 p57

Tool developed for setting and checking super-elevation used to check roadway.

M/J '65 p56

Transferring a shaped contour interval to a drawing.

M/J '65 p57

Interchanges, landscaping and--See **LANDSCAPE & LANDSCAPE MAINTENANCE**

## **By County**

### **Alameda Co.**

Castro Valley Project; I-580/I-880 [US 50/Rt. 17] connection

Aerial view of Foothill Blvd. interchange.

S/O '56 p30

Official party at ribbon-cutting for Castro Valley Project.

S/O '56 p31

Connection from I-580/I-880 [US 50/Eastshore Fwy.] between San

Lorenzo and Castro Valley near East 24th St. interchange.

M/A '57 p12

Dublin Interchange looking north.

M/A '56 p10

### **East Bay Distribution Structure (Oakland)**

Future plans for.

M/A '54 p12

Pier construction for additional ramps.

S/O '54 p5

Construction near MacArthur Blvd.

M/A '55 p7

Construction on additions near Bay Br. approach.

M/A '55 p7

East Bay distribution structure as originally constructed in 1936.

N/D '55 p24

East Bay distribution structure after reconstruction, 1955.

N/D '55 p25

Oakland mayor Clifford E. Rishell, Engineer B.W. Booker (Dist 4), and  
 guests at reception sponsored by Alameda Co. Advisory Committee.

N/D '55 p26

Distribution structure from Bay Br. toll plaza east.

M/A '56 p14

Distribution structure in Oakland looking east.

M/A '56 p14

Greenville overhead under construction (I-580, Altamont Pass).

Mar '38 p11

Overhead structure over SP RR and arched underpass carrying WP tracks.

S '38 p7

Greenville overhead crossing both railroads.

S '38 p7

Foothill Blvd./I-580 [US 50] Interchange.

# **GRADE SEPARATIONS Alameda Co., Continued**

## **I-880 (Nimitz Fwy.) [Eastshore Fwy, Rt. 17; US 40]**

Beard Rd. Interchange on the Eastshore Fwy.	M/A '58 p15; M/A '59 p1
Davis St. interchange (San Leandro).	J/A '52 p51; M/A '54 p16
Jackson St. separation (Hayward) just after opening to traffic.	J/F '58 p58
Separation structure on Eastshore Fwy.	J/F '58 p59
29th Ave. overhead.	M/A '49 p8
Winton Ave. cloverleaf interchange.	J/A '53 p43
Moraga Ave. Interchange on Rt. 13 (Warren Blvd Fwy.)	M/J '64 p29
Niles grade separation project, the Edenvale Underpass under tracks of WP RR	N '37 p19
N. Niles Underpass under tracks of the SP RR Co. at Niles.	N '37 p19
Powell St. separation structure under construction [I-80].	J/A '54 p6+
Redmond overhead under construction (Altamont Pass).	Mar '38 p11
Sunol Underpass under construction.	Jan '42 p11
Old grade crossing west of Sunol, Niles Canyon Rd.	Jan '42 p12
Blind intersection with SP grade crossing and blind approach to WP underpass near Sunol.	S '38 p2
Narrow underpass with impaired clearance and inadequate sight distance beneath WP RR near Sunol on Rt. 84 [Rt. 107].	S '38 p3
Grade crossing highway on "S" curve near Sunol station.	S '38 p3
University Ave. grade separation, Berkeley	
Sketch of planned structure.	Apr '39 p22
University Ave. overhead structure in Berkeley.	Jan '40 p23
Official group at dedication.	Jan '40 p23
4-lane divided roadway.	Jan '40 p23
Crossing of main railroad tracks.	Jan '40 p23

## **Contra Costa Co.**

Byron Hwy. [county road] railroad grade crossing on	N/D '53 p14
Crockett Interchange piers (I-80).	J/F '57 p37
El Cerrito overhead under construction (I-80) [US 40].	J/A '60 p59
T-beam construction underneath, side of overhead.	J/A '60 p60
I-80 [US 40]; Pinole grade separation near highway bridge over railroad.	S '39 p23
New railroad cut; divided highway approach.	S '39 p23
Grade separation structures carrying county road and railway.	O '39 p21
Overcrossing carrying Wilbur Ave. over Santa Fe. RR tracks near Antioch.	J/A '59 p44
Interchange structures seen from streets of Crockett. [I-80]	J/F '59 p9+
Oakvale Rd. overcrossing (Rt. 24).	M/J '60 p30
Orinda interchange (Rt. 24)	
Drawing of proposed Orinda Cloverleaf superimposed on aerial photo.	N/D '54 p47
Final stage of construction on Orinda interchange.	M/A '55 p12
Completed Orinda Interchange.	S/O '55 p59
Railroad Ave overcrossing (Rt. 4).	N/D '52 p6
Rt. 24 separation structure on Walnut Creek Bypass.	N/D '60p52
Stewartville Rd. underpass looking north toward Antioch (Rt. 4).	N/D '52 p7
Stewart Rd. undercrossing (Rt. 4).	N/D '52 p5
Three-level interchange near Hercules at I-80/Rt. 4 [US 40/Rt. 75] junction.	M/A '59 p15
Walnut Creek Interchange on Rt. 24.	M/A '60 p13

## **Humboldt Co.**

Scotia Bypass undercrossing showing on-ramp underpass and off-ramp. (US 101).	S/O '53 p8
US 101/Rt. 299 interchange north of Arcata; Completed interchange.	N/D '56 p45
Trinidad Interchange under construction (US 101).	J/A '60 p23

## GRADE SEPARATIONS, Continued

### Fresno Co.

California Ave. overcrossing (Rt. 99, Fresno).	M/A '49 p27+
Mendocino Ave. Overcrossing and Overhead south of Kingsburg.	J/F '65 p20
Monterey St. overpass structure (Rt. 99, Fresno).	M/A '49 50
Stairway for G St. crossing of southbound Monterey St. overpass.	M/A '49 p28
Mountain View Ave. junction.	J/F '65 p18

### Kern Co.

Alfred Harrell Hwy. (Hart Park Rd.)-China Grade Loop Interchange.	N/D '57 p11
Bakersfield/Hart Memorial Park diamond interchange.	M/A '60 p43
Delano grade crossing on Rt. 99, and subway that replaced it.	May '39 p13
Famosa grade separation.	Mar '37 p21
Old Famosa Overhead and approach fills.	J/A '57 p9
Famosa Overhead under construction.	J/A '57 p9
Grade separation structure on Oak St. [Rt. 141] in Bakersfield.	N '39 p21
Minkler Spur Underpass viewed from point north of structure.	J/F '49 p21
Pierce Rd. rotary separation structure north of Bakersfield, Kern Co.	J/F '51 p52
Rt. 58 [Rt. 178]; Tehachapi-Keene highway crossing Tehachapi overhead.	N/D '48 p40
Rt. 99/Rt. 466 [US 466] separation under construction.	J/A '57 p8
Separation structure carrying traffic over Garces Circle. in Bakersfield.	S/O '58 p36
Union Ave./Panorama Dr. Interchange in Bakersfield.	M/A '60 p43

### Los Angeles Co.

Atlantic Blvd. grade crossing.	F '37 p3
Atlantic Blvd. grade separation under construction.	M/J '49 p57
Barham Blvd. separation structure.	M/A '49 p24
Century Blvd.-Sepulveda Blvd. separation at LA. International Airport.	J/F '67 p8

### East Los Angeles Interchange ["East Loop"]

Model of interchange.	N/D '58 p19+; S/O '59 p20; J/F '61 p15
Interchange under construction.	S/O '59 p20; J/F '61 p17
Completed interchange roadways at East L.A. interchange.	J/F '61 p18
Branch connections of East Los Angeles interchange.	M/A '61 p10
Dedication for I-5 (Golden State Fwy.-Santa Ana Fwy.) connection.	M/J '61 i.cvr.
Junction of Pomona, Santa Ana, Santa Monica, and Golden State Fwys.	J/F '67 p42
East Redondo Beach grade separation with Santa Fe RR	S/O '54 p52
Fireside Blvd. separation structure.	F '37 p3
Old grade crossing it replaced.	F '37 p3
Before and after views of dangerous grade crossing on Firestone Blvd.	May '39 p11
Fletcher Dr. [Rt. 162]; cars piled up behind grade crossing.	N/D '54 p4
Four-Level grade separation structure	
Under construction.	J/F '49 p61
Looking westerly along upper Hollywood Parkway level.	J/F '49 p62
Four-Level structure under construction near Court St.	J/F '49 p64
Autos using lowest level for first time.	M/J '51 p15
Model of Four-Level grade separation structure on display.	S/O '52 p22
Traffic on Four-level structure, 1951; Traffic on structure 1956.	J/F '56 p64
Four-level structure looking south along Pasadena-Harbor Fwy.	J/F '59 p31
View from underneath nearly completed Four-level structure ca. 1951.	J/A '60 p56
Four-level interchange.	M/J '66 p14
Artist Ralph Hulett's painting of a section of the Four-level.	J/A '66 p17
Ft. Tejon Overcrossing under construction.	S/O '60 p7



# **GRADE SEPARATIONS Los Angeles Co., Continued**

## **Interchanges of major freeways**

1-5/I-10 (Santa Ana/San Bernardino Fwy.) Interchange	
Junction of San Bernardino-Santa Ana Fwy.	J/A '48 p14
Pretressed span over eastbound I/5 (Santa Ana Fwy.) bridge and on-ramp for eastbound I-10 (San Bernardino Fwy.).	M/A '55 p33
Interchange when first opened.	J/F '56 p62
Heavy traffic on interchange during construction of structure.	J/F '56 p62
1-10/I-405 (Santa Monica Fwy./San Diego Fwy.) interchange.	N/D '64 p5
1-5/I-605 (Santa Ana-San Gabriel River Fwy.) Interchange, columns for	M/A '64 p30
1-5/I-710 (Santa Ana/Long Beach Fwy.) Interchange	
Aerial view of interchange.	M/A '56 p30; J/F '57 p9; S/O '58 p56
Construction of interchange structures.	M/A '56 p30+
Completed interchange.	M/A '61 p11
1-5/Rt. 2 (Golden State-Glendale Fwy.) Interchange.	J/F '61 p21+
Crane pouring columns for bridge structures.	J/F '61 p18
Nearly completed interchange.	N/D '61 p36
1-5/Rt. 110 (Golden State/Arroyo Seco-Pasadena Fwy.) Interchange.	J/F '61 p22
Key construction features of interchange.	S/O '61 p11
Overhanging abutment at north end of Arroyo Seco Channel Off-ramp.	S/O '61 p12
1-5/Rt. 126 [Golden State Fwy.-Rt. 79] Interchange	
Under construction.	M/A '64 p22
Interchange near Castaic Junction.	M/J '65 p34; S/O '65 p23
1-10/I-5 (San Bernardino-Golden State Fwy.) Interchange.	J/F '60 p13
1-10/I-405 (San Bernardino-Long Beach Fwy.) Interchange under construction.	J/F '60 p9
1-10/Rt. 2 [Rt. 26/Rt. 2] separation under construction near Macy St.	M/A '55 p30+
1-405/Rt. 10 (San Diego/Santa Monica Fwy.) Interchange	
Under construction.	N/D '64 p26, 65; J/F '67 p37
1-710/Rt. 60 (Long Beach-Pomona Fwy.) Interchange under construction.	M/J '65 p38
1-110/Rt. 10 (Harbor-Santa Monica Fwy.) Interchange.	J/F '67 p43
Harbor Fwy. detour around construction of Santa Monica Fwy. separation near Venice Blvd.	J/A '59 p31+
Construction near north end of Harbor Fwy. detour.	J/A '59 p32
Temporary bridge carrying Venice Blvd. over Harbor Fwy. detour.	J/A '59 p32
Pouring concrete on third level of Santa Monica Fwy separation.	J/A '59 p33
Reinforcing steel bars, concrete pouring operations.	J/A '59 p33
Completed portion of third level.	J/A '59 p34
1-710/Rt. 1 (Pacific Coast Hwy.) Interchange.	S/O '58 p49
<b>I-5; Golden State Fwy.</b>	
Bridge bents under construction for I-5/I-210 [Rt. 4/157] separation.	J/F '54 p41
Cloverleaf interchange with Western Ave. in Glendale.	J/F '58 p7
Construction underway on interchange for future Ventura Fwy.	S/O '57 p22
Grade separation with SP RR and traffic interchange with Sepulveda Blvd.	J/F '56 p65
<b>I-5; Santa Ana Fwy.</b>	
Lakewood cloverleaf traffic interchange.	J/F '54 p8
"Mix-Master" interchange system near Atlantic Blvd.	J/F '52 p21
Garfield Ave. undercrossing.	J/F '52 p23
Olympic Blvd. overpass under construction.	J/F '52 p21+
Santa Fe RR grade separation under construction.	J/F '52 p23
Santa Fe RR grade separation and Lincoln St. Overcrossing.	S/O '55 p10
Simons Underpass, steel girder being secured in place.	M/J '52 p21
Simons Underpass structure nearly completed.	N/D '52 p39
Dismantling Simons Underpass shoofly [temporary] bridge structure.	N/D '52 p39



# **GRADE SEPARATIONS Los Angeles Co., Continued**

I-10; San Bernardino Fwy. [Ramona Fwy.]	
Atlantic Blvd traffic interchange.	J/F '54 p12
Combination grade separation structure spanning Garey Ave. [Rt. 71], McKinley Ave., and Orange Grove Ave.	J/F '55 p24
Floral Park undercrossing under construction.	J/F '52 p19
Pomeroy St. overhead, a companion traffic interchange structure to Soto St.	M/A '43 p19
Santa Ana Fwy. interchange under construction.	J/F '55 p24
Soto St. interchange structure nearing completion on Ramona Fwy.	M/A '43 p19
I-110; Harbor Fwy.	
Loop viaduct bridge structures constructed over Harbor Fwy.	J/F '61 p18
North Anaheim St. undercrossing under construction, Wilmington.	J/A '55 p58
I-210 (Foothill Fwy.); Rt. 159/118 [Rt. 165/9] separation under construction.	J/A '54 p51
I-605; San Gabriel River Fwy. Interchange under construction at Valley Blvd.	M/A '64 p31
<b>I-710; Long Beach Fwy.</b>	
Artesia Ave. cloverleaf interchange.	N/D '57 p7
Belhart Ave. grade separation and traffic interchange facilities.	N/D '52 p11
Dominguez St. separation and UP RR separation under construction.	J/A '54 p24
Steel girders in place for Dominguez St. separation structure.	J/A '54 p29
East Yard Overhead structure, placing deck slab concrete on.	J/A '54 p30
UP railroad tracks under East Yard Overhead.	J/A '54 p31
Firestone Blvd. cloverleaf and Los Angeles Rvr. Channel.	S/O '58 p52
Florence Ave. cloverleaf interchange.	N/D '57 p7
Landkershim Blvd. underpass (Hollywood Fwy., US 101)	M/A '49 p22
Los Feliz Rd. grade crossing (Glendale-Los Angeles city line).	N/D '54 p3
Mission Rd./Huntington Dr./Soto St. intersection, separation structure.	F '37 p3
Old grade crossing it replaced.	F '37 p3
N&O Street Viaduct in Wilmington (Rt. 1) [Rt. 60, Roosevelt Hwy.]	Aug '37 p33
Pico underpass beneath UP at Whittier Blvd. (Rt. 19) [Rosemead Arterial/Rt. 168].	D '38 p23
Pomona grade separation; south channelization of approach to grade separation.	May '40 p7
Rt. 1 [Coast Hwy.]/Colorado Ave. intersection, Santa Monica.	
tunnel, ramps, and overhead grade separation structure at.	S '40 p18
Overhead structure across 4-lane Rt. 1. at Santa Monica.	S '40 p19
Tunnel and ramp at intersection with Appian Way.	S '40 p19
Rt. 19 grade separation on carrying railroad tracks over highway near Riviera.	D '38 p23
Rt. 110; Arroyo Seco Pkwy.-Pasadena Fwy.	
Castelar St. at Figueroa St. intersection, site of proposed grade separation.	O '40 p8
Grading at site of Bishops Rd. grade separation and construction of dam.	S '41 p7
Grading work and site of two overhead grade separation structures at intersection of Castelar and Figueroa Streets.	S '41 p8
Park Lane grade separation under construction.	S '41 p8
Several separation structures on Arroyo Seco Pkwy.	J/F '44 p7
Rosemead Blvd. underpass near Rudell Station (Rt. 164) [Rt. 168]	D '38 p23
San Gabriel Blvd.; old subway and new highway subway.	May '39 p14
Terminal Island Fwy.	
Hobson Ave. overhead, and Terminal Island Fwy. undercrossing.	N/D '47 p28
Classification Yard overhead.	N/D '47 p28+
Union Pacific Overcrossing on Terminal Island Fwy.	N/D '47 p33
US 101, Hollywood Fwy.; Western Ave. overcrossing under construction.	J/F '50 p23
US 101; Ventura Fwy.-Holland Ave. interchange under construction.	J/F '59 p35
US 101/1-405 (Ventura/San Diego Fwy.) interchange	J/F '59 p39; M/J '60 p2
Valley Blvd./Soto St. intersection, separation structure.	F '37 p3
Washington Blvd.; four lanes funneled into two-lane underpass in L.A.	N/D '54 p5

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**GRADE SEPARATIONS, Continued**

**Marin Co.**

Alto interchange near Richardson Bay Br. (US 101).	M/A '57 p20; M/A '58 p16
California Park Overhead under construction (US 101/Rt. 17 jct., San Rafael).	M/A '58 p17
Corte Madera Interchange (US 101).	M/A '58 p16
Ignacio Wye Interchange on US 101 at junction with Rt. 37.	M/J '64 p34
Forbes Overhead, one mile north of San Rafael.	J/A '52 p34
Forbes Overhead twin structures (US 101).	M/A '58 p16
Greenbrae Interchange (US 101).	M/A '59 p52; M/A '60 p17
Under construction.	M/A '57 p17
Lucas Valley undercrossing; Lucas Valley underpass.	J/A '52 p35
Overcrossing under construction on US 101 near San Rafael.	S/O '53 p10
San Pedro Rd. undercrossing north of San Rafael.	J/A '52 p34
San Quentin Wye overcrossing on US 101.	S/O '53 p10
San Quentin Wye separation structure.	S/O '53 p11
Looking south from overcrossing toward San Francisco.	S/O '53 p13
Construction looking north from separation structure toward San Rafael.	S/O '53 BC
San Quentin Wye Overcrossing connection to Rt. 17 (San Rafael).	M/A '60 p17
US 101/Rt. 1 grade separation at Waldo showing Marin City.	N/D '43 p6
Waldo grade separation of US 101 and Marin City road.	N/D '43 p7

**Merced Co.**

Livingston Underpass (Rt. 99)	
Old railroad crossing looking southerly toward Livingston.	F '38 p17
Traffic blockade caused by train.	F '38 p17
Excavation for Livingston underpass.	F '38 p17
Completed underpass at Livingston.	Mar '39 p12
Scene at opening of Livingston underpass.	Mar '39 p12
Railroad grade crossing, and underpass that eliminated it.	May '39 p13
Rt. 99/Rt. 59 (J St.) separation in Merced.	J/A '64 p45
W. Merced overcrossing under construction.	J/A '64 p45

**Monterey Co.**

Interchange south of Soledad north of Salinas River (US 101).	M/A '61 p52
Railroad grade intersection with US 101 at entrance to Salinas, before/after.	May '39 p12
<b>US 101; Salinas Fwy.</b>	
Alisal St. Undercrossing under construction.	M/A '54 p36
E. Market St. separation structure under construction.	M/A '54 p37
Old Spence Underpass.	M/A '54 p35
N. Main St. interchange.	M/A '54 p36

**Napa Co.**

First St. Interchange under construction in Napa on Rt. 29	M/J '64 p35
--	-------------

**Orange Co.**

**Newport Overhead**

East and west ramps and Rt. 1 [Coast Hwy.] passing under viaduct.	Jan '37 p7
Official party at dedication.	Jan '37 p7
Gov. Merriam cutting wire which held closed old gate barrier.	Jan '37 p7
Crowd attending dedication.	Jan '37 p7
Nicolas Ave. Underpass, Fullerton. S/O '60 p19	
<b>Rt. 22/I-5 junction</b> (Garden Grove-Santa Ana Fwy.) [Rt. 2/43]	
Separation structure at Tustin Ave.	J/A '55 p51+
Interchange under construction.	M/A '64 p28
Completed.	N/D '64 p15, 51; M/J '65 p47
Four-quadrant cloverleaf interchange at junction of Rt. 55 and I-5.	N/D '64 p44
Rt. 133/I-5 (Santa Ana Fwy.) separation structure.	J/A '58 p24

## **GRADE SEPARATIONS, Continued**

### **Placer Co.**

Bowman Overhead near beginning of project, old structure on right. M/A '51 p58  
 Colfax grade separation structure. D '39 p27

Grade crossing of tracks of Southern Pacific main line in city of Colfax. May '39 p19

East Auburn Underpass, ca. 1957. J/F '65 p57

Old East Auburn Underpass, 1914. J/F '65 p56

Hallbom Rd. Undercrossing under construction (I-80, Newcastle). S/O '56 p42

### **Roseville Underpass**

Jerrold L. Seawell at ground-breaking ceremonies. N/D '48 p24

Charles C. Lee spades first earth as official group looks on. N/D '48 p26

Roseville underpass, which carries traffic under railroad tracks to and from I-80 [US 40] and Rt. 65 [US 99E]. M/A '50 p1

Aerial view of the improvement and surrounding area. M/A '50 p2

Widening of Rt. 65 [US 99E] gives sight distance to Andora subway. M/A '50 p3

### **Plumas Co.**

Grade crossing on Rt. 89 [Rt. 83] near Greenville before improvement. Mar '38 p15

Structures across railroad and stream connected by highway fill on improved alignment. Mar '38 p15

Reinforced concrete overhead across railroad on two 4-column piers. Mar '38 p15

### **Portola Overhead**

Traffic delayed by train at grade crossing. N/D '53 p13

Grade crossing without blocked traffic. N/D '53 p13

Railroad overhead and bridge over N. Fork Feather River under construction. N/D '53 p53

Bridge across M. Fork Feather River and grade crossing before improvement. S/O '54 p25

Labor Day parade over Portola Overhead. S/O '54 p26

Assemblywoman Pauline Davis and official party at ribbon-cutting ceremony. S/O '54 p26

### **Riverside Co.**

Box Springs grade separation overhead near Beaumont. Aug '37 p17

I-10 [US 70-99] (Redlands-Beaumont); undercrossing at intersection of Rt. 60. M/J '51 p23

Rt. 111; Palm Springs-Rt. 86 [US 99] unit

Underpass beneath railroad on Palm Springs realignment. Mar '40 p11

Reinforced concrete slab bridge over Whitewater River overflow channel. Mar '40 p11

### **Sacramento Co.**

12th St. underpass, Sacramento,

Widening about halfway completed. M/J '49 p22

Close-up of pile driving operations on underpass project. M/J '49 p23

Bus-80; North Sacramento Fwy.

Depressed section under Marconi Ave. structure, not yet under construction. S/O '46 p18

Canterbury Rd. overcrossing, Deadman Slough structure in distance. S/O '46 p18

Elvas Underpass under SP RR tracks (Bus-80, Elvas Fwy.). N/D '54 p17

Fruitridge Rd. West Interchange (S. Sacramento Fwy., Rt. 99) [US 50-99] J/F '62 p16

North Sacramento-Elvas Fwy. interchange near Arden Way interchange. J/A '61 p45

Sutter Rd. Overpass and approach. N/D '61 p43

### **San Bernardino Co.**

#### **8th St. Underpass, Colton**

Sen. James E. Cunningham and official party at ribbon-cutting ceremony. J/A '56 p26

Traffic jam on 8th St. at SP RR crossing before construction. J/A '56 p27

Completed 8th St. Underpass at I-10 [US 99] junction. J/A '56 p27

8th St. Underpass, J St. off-ramp undercrossing, and 8th St. Undercrossing. J/A '56 p28

Cedar Ave. grade separation (I-10) [Ontario-Colton Fwy.]

Under construction. J/A '46 p20

Cedar Ave. grade separation at Bloomington. J/A '48 p5;

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**GRADE SEPARATIONS San Bernardino Co., Continued**

Cherry Ave. overcrossing and railroad overhead replaces former grade crossing.	M/J '60 p43
Citrus Ave. overhead under construction.	M/J '60 p45
Colton three-level interchange: I-10 [US 70-99]/ I-15E [US 91-395].	N/D '58 12
Colton interchange joining San Bernardino Fwy. and Riverside Fwy.	N/D '58 14
Night crew lifting girders into position at three level interchange.	M/J '60 p45
Crestline Interchange	
Relocating telephone poles by helicopter during construction.	J/A '66 p18
Interchange on side of Mt. Anderson before reconstruction.	J/A '66 p21
Model of proposed interchange; Completed Crestline Interchange.	J/A '66 p21
Cross Roads Interchange (I-10)	M/A '60 p7
Official party at dedication.	M/A '60 p4
Haven Ave. Interchange under construction (I-10; San Bernardino Fwy.)	M/J '59 p27
Highland Ave. (Rt. 30)/I-15 [US 66-91] Interchange, San Bernardino.	M/J '59 p31
I St. Overhead, San Bernardino	S/O '51 p42
Construction for Pier 4 shaft adjacent to Santa Fe main track.	S/O '51 p42
5th St. traffic blocked by train prior to construction of overhead.	S/O '51 p43
Mt. Vernon Ave. grade separation (I-10, Colton).	M/A '57 p21
Riverside Ave. interchange and freeway on I-15E [US 70-99].	M/J '60 p46
State St. interchange on I-15 [US 66-91-395] near San Bernardino.	N/D '58 p15

**San Diego Co.**

18th St. UP undercrossing, National City.	J/F '51 p35; S/O '51 p20
24th St. UP undercrossing, National City.	J/F '51 p35; S/O '51 p20
56th St. separation and subdivision near east city limits of San Diego (Rt. 94).	N/D '55 p6
Douglas St. overcrossing on Washington St. connection to new Navy access road.	M/A '45 p21
F St. UP bridge, Chula Vista.	J/F '51 p36
Fairmont Ave./I-8 [US 80] Interchange east of San Diego.	N/D '58 p40; M/J '61 p26
<b>Four level interchange; I-5/Rt. 163 [US 101-395]</b>	
Model of proposed interchange in San Diego.	S/O '60 p15
Construction, showing temporary haul bridge over Cabrillo Fwy.	M/A '61 p61
Four-level interchange under construction.	M/A '61 p62; N/D '61 p55
Completed four-level interchange.	J/A '64 p2+
Landscaping on four-level interchange.	S/O '65 p11; J/F '66 p42
E St. Freeway overcrossing, Chula Vista.	M/J '60 p10
H St. overcrossing under construction.	S/O '51 p20
I-5; Oceanside-Carlsbad Fwy. [US 101] grade separations and interchange ramps.	M/A '54 p34
I-5/Rt. 163 [US 101-395] interchange in San Diego. model of.	M/J '60 p10
I-8 [US 80]/Fairmont Ave. interchange near E. San Diego.	M/J '59 p3
I-8 [US 80]/Rt. 67 interchange near El Cajon.	M/J '59 p5
I-15 [US 395]/Clairmont Mesa Interchange.	M/J '59 p7
Lake Murray/I-8 [US 80] Interchange, San Diego.	N/D '58 p33
Magnolia Ave. Interchange under construction on I-8 [US 80].	S/O '61 p67
Mission Valley-Cabrillo Fwy. Interchange; I-8/Rt. 163 [US 395-US 80]	
Aerial view of.	M/A '48 p3, 5
Interchange under construction near San Diego.	N/D '58 p39
Reconstructed interchange in San Diego.	J/A '60 p2+; N/D '60 p14
Reconstructed interchange at night.	J/A '60 p2
Interchange during reconstruction.	J/A '60 p3
Completed section of rebuilt interchange near Presidio Park Overcrossing.	J/A '60 p4
Interchange before reconstruction.	J/A '60 p5
Mission Valley I-8/I-5 cloverleaf grade separation. [US 80/US 101]	N/D '43 p2
Mission Valley interchange by day; interchange at 2:30am.	N/D '51 p11

# **GRADE SEPARATIONS San Diego Co., Continued**

Mission Valley Overpass, San Diego.	S/O '44 p2
Model of proposed I-5/I-8/Rt. 109 Interchange on display in San Diego.	M/J '65 p58
Oceanside grade separation, showing three planes of travel.	M/J '47 p31
Palomar St./I-5 [US 101] Interchange, salt drying beds in distance.	N/D '58 p37
Rt. 67/I-8 [US 80] Interchange under construction at Grossmont Summit.	N/D '58 p39
Ward Rd./I-8 [US 80] intersection, 1955; Ward Rd./I-8 [US 80] Interchange, 1961.	M/J '61 p26
Washington St. Interchange on I-5 [US 101] in San Diego.	N/D '58 p37
Vista Way separation at I-5 [US 101]/Rt. 78 junction (Oceanside-Carlsbad).	N/D '55 p2

## **San Francisco Co.**

### **I-280 [Southern Fwy., Rt. 82]**

Interchange under construction at junction with Bayshore Fwy.	M/A '60 p23
US 101 (Bayshore Fwy.)	
Division St. interchange.	M/A '55 p3
Interchange under construction at junction with first unit of Southern Fwy.	M/A '59 p6
Pile driving operations at 9th and Bryant Sts., San Francisco.	M/A '52 p51
Steel stringer spans of S.F. Airport interchange structures, 1947.	S/O '50 p129
US 101/Rt. 82 [I-280] Interchange in San Francisco.	J/A '64 p12

## **San Joaquin Co.**

Charter Way Underpass, Stockton	
Dir. of PW Earl Lee Kelley addressing crowd at dedication of.	May '37 p11
Official group at ribbon cutting ceremony; Close-up of underpass.	May '37 p11
Harding Way Underpass in Stockton.	J/F '61 p66+
I-205 [US 50]/Rt. 120 Interchange at Mossdale under construction	J/A '58 p21
Main St. overhead, Stockton US 99/50 separation structure.	J/A '49 p30; M/A '50 p53
Mariposa Rd. and Farmington Rd. Interchange on Rt. 99, a step in the conversion of Stockton Bypass from expressway to full freeway.	J/A '59 p6; J/F '65 p29
Rt. 99 underpass of Central California Traction Railroad.	J/A '49 p33
Rt. 99 underpass of Atchison, Topeka, and Santa Fe RR, Stockton.	J/A '49 p33
Wilson Way Underpass (Rt. 99, Stockton)	
Dedicated by Gov. Frank F. Merriam.	Mar '38 p16
Official group at Wilson Way dedication, 2/19/38.	Mar '38 p16
Where Rt. 99 formerly crossed the railroad tracks at Wilson Way, replaced by divided underpass.	May '39 p12; S '39 p13
US 50 looking south from separation of Wilson Way.	J/A '49 p32

## **San Luis Obispo Co.**

March St. grade separation, completed structures for.	J/A '53 P37
Oceano; grade separation on "S" alignment over railroad at Oceano.	O '38 p2
La Cuesta grade separation with small angle between road and railroad.	D '38 p17
San Miguel; interchange for local traffic entering or exiting bypass west of the city.	M/A '58 p49

## **San Mateo Co.**

Rt. 1/Skyline Blvd. [Rt. 56/Rt. 55] Interchange under construction.	M/A '58 p20
US 101 (Bayshore Fwy.)	
Cloverleaf crossing to San Francisco airport.	S/O '50 p111
Final stages of construction near Hillsdale Blvd. interchange, San Mateo.	M/A '55 p5
Ralston Ave. interchange in Belmont near completion of construction.	M/A '55 p5
Willow Rd. interchange, looking north.	M/A '56 p8

## **Santa Barbara Co.**

Salsipuedes twin overhead structures under construction.	M/J '48 p12
Looking southeasterly between the two Salsipuedes structures.	M/J '48 p13
View from under the structures.	M/J '48 p13

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**GRADE SEPARATIONS, Continued**

**Santa Clara Co.**

Bascom Ave.-Washington St. Interchange on I-880 [Rt. 17], San Jose.	J/A '60 p13
El Camino Real Underpass (US 101, Palo Alto).	
Gov. Olson, City Engineer Harold L. Anderson, and Palo Alto Mayor	
J. Byron Blois on horseback for dedication parade.	Mar '41 p4
Completed structure.	Mar '41 p5
Embarcadero Underpass, Palo Alto.	
Official group at dedication.	F '37 p22
Wide subway for Embarcadero lateral swinging down to underpass	
with pedestrian ramps on either side.	F '37 p23
Structure carrying railroad and Alma Street over the subway.	F '37 p23
Crowd at speakers' stand, high school band at dedication.	F '37 p23
I-280/I-880 [Rt. 17] grade separation northeast of San Jose.	N/D '65 p80
McKee Rd. Interchange east of San Jose. (US 101) [US 101-By]	M/A '57 p6
Oregon expressway interchange on Bayshore Fwy. (US 101).	M/J '65 p39
Polhumus St. crossing in San Jose before improvement.	N '40 p20
New Polhumus St. underpass.	N '40 p21
Rt. 17 Interchange in Los Gatos.	J/A '60 p13
University Ave. grade separation in Palo Alto, model of.	D '39 p23
General view and close-up of Underpass beneath SP railroad.	Mar '41 p5
US 101/I-880 [Rt. 17] Interchange near San Jose.	J/A '60 p12+
Under construction	M/A '60 p20

**Santa Cruz Co.**

Morrissey Ave. interchange in Santa Cruz connecting Rt. 17 and Rt. 1.	M/A '59 p14
N. Aptos underpass.	N/D '48 p12
Pasatiempo Interchange. (Rt. 17).	M/A '60 p30
Soquel Rd. overcrossing.	N/D '48 p12
Spreckles Dr. undercrossing.	N/D '48 p12

**Shasta Co.**

Bowman Rd. Interchange, precast, prestressed concrete girder being installed at.	J/F '65 p38
I-5 [US 99]; 4-lane subway with 8-ft division strip near Redding.	Jun '39 p21; S '39 p12
Old subway it replaced on I-5 [US 99] near Redding.	Jun '39 p20

**Siskiyou Co.**

Bailey Hill Underpass under construction.	J/A '48 p12
Old narrow underpass which was replaced by Bailey Hill Underpass.	J/A '48 p13
Looking across barrel of Bailey Hill Underpass.	J/A '48 p13
Completed Bailey Hill Railroad Underpass.	M/A '49 p56
Old narrow underpass; replacement underpass (I-5) [US 99].	J/F '50 p12

**Solano Co.**

Bassalt Subway, being christened by wife of George T. McCoy.	M/A '45 p20
Davis-Dixon cut-off; 4-lane divided underpass on I-80 [US 40] where SP RR	
crosses the highway.	O '42 p12
Grade separation carrying Dixon-Grant Rd. traffic over I-80.	J/F '65 p52
At grade intersection adjacent to UC Davis campus before improvement.	J/F '65 p52
I-780/I-80 [Rt. 74/US 40] intersection being eliminated by overcrossing,	
shown under construction.	S/O '57 p63
I-780 [Rt. 74] separation and Benicia Rd. Overcrossing after freeway.	J/A '61 p25
Laurel St. separation structure under construction (Vallejo, I-80).	J/A '58 p16
Magazine St. Overhead in Vallejo.	N/D '56 p37
Official party at ribbon-cutting ceremony for Magazine St. Overpass.	N/D '56 p37
Pedrick Rd. overcrossing near Dixon (I-80), substructure of.	J/F '65 p51

## GRADE SEPARATIONS, Continued

### Sonoma Co.

- Rt. 104 separation and overhead under construction. M/J '55 p8  
 Three level interchange of US 101/Rt. 12 in Santa Rosa. M/J '64 p48

### Stanislaus Co.

- Turlock grade crossing overpass** (Rt. 99/main line railroad tracks)  
 Under construction. N '39 p25  
 Unique design of placing girders normal to the piers of skew curve. N '39 p25  
 Laying reinforcing steel on bridge deck. N '39 p25  
 View of Turlock grade crossing overpass. Apr '40 p14  
 Ribbon cutting ceremony at dedication of Turlock overpass. Apr '40 p15  
 S/O '58 p35

### Tulare Co.; Visalia Airport Interchange on Rt. 99 through the city.

### Ventura Co.

- Camarillo Overhead under construction. S/O '53 p23  
 Partially completed grade separation structure at Saviers Rd. M/J '55 p60

### Yuba Co.

- East Marysville Underpass on Rt. 20 (12th St.). J/F '65 p55  
 Old East Marysville Underpass shortly after construction in 1911. J/F '65 p56

## HIGHWAY PLANNING AND DESIGN

- Driving simulator device used to test driver's reaction. M/A '61 p79

### Highway Planning Survey

- Curvometer attachment on steering wheel of survey car used to measure curvature of highway. Jul '37 p8  
 Supermeter mounted on car dash to measure superelevation and gradeometer mounted on door to measure percent of grade. Jul '37 p8  
 Sight distance survey party measuring gradient, taking measurement of limited sight distance on vertical curve, measuring limited sight distance on horizontal curve, and measuring curvature and superelevation. Jul '37 p9

### Joint Fact-Finding committee on Highways, Streets and Bridges

- Members of, group photo. N/D '45 p31  
 G. Donald Kennedy, engineering consultant for fact-finding committee. S/O '46 p1  
 Sen. R. Collier Burns and G. T. McCoy of fact-finding committee. S/O '46 p4  
 George T. McCoy and Fred J. Grumm with fact-finding committee. J/F '46 p20

### Kelsh plotter with "Auto-trol" digital scale used for taking terrain cross sections and recording directly on punch cards.

N/D '64 p42

### LARTS (Los Angeles Regional Transportation Study)--See **TRAFFIC**

### Photogrammetry (Aerial Photography)

- Aerial photo showing patterns of land use. N/D '51 p25  
 Vertical aerial photo used to produce contour map. N/D '51 p26  
 Vertical aerial photo and corresponding portion of detailed map which was plotted and drawn directly from the aerial photo. M/A '56 p33  
 Contact prints at some of the scales used for planning and location studies. N/D '56 p24  
 Several possible highway locations noted on aerial photo mosaic for a public presentation of route studies. N/D '56 p24  
 Pair of overlapping, vertical aerial photos used for mapping a portion of a project. N/D '56 p27  
 Photogrammetrist operating stereo-plotter. M/J '59 p15  
 Contour map made from aerial photography. M/J '59 p15  
 Paint transfer device used in the operation of photogrammetric control bridging. N/D '65 p40  
 Planning officials and County Road Commissioner studying routes on map. N/D '64 p43

### Models of freeways constructed so that geometrics of traffic service, physical relationship to adjacent property, highway safety and aesthetic impact may be studied during design of project.

N/D '66 p21



# **HISTORIC LANDMARKS & MONUMENTS**

Amador Co.; Hetty Green Mine on Rt. 49 (Mother Lode Hwy.)	S/O '45p5
Humboldt Co.; Culbert L. Olson Grove, US 101 (Redwood Hwy.)	
Gov. Olson speaking to assemblage at dedication of.	Jul '40 p18 C
Kern Co.; Garces Circle, Bakersfield	
Statue of Frey Francisco Hermenegildo Garces.	J/A '46 p18
Statue of Father Garces in center of Rt. 99 traffic circle.	J/A '46 p18
Statue of Father Garces being moved.	M/A '57 p57
Los Angeles Co.	
Adobe residence of Pio Pico, last governor of California under Mexican rule.	J/A '64 p37
Ft. Tejon State Historical Park.	S/O '65 p30
Ralphs ranch house at Gorman Station, 1913.	S/O '65 p20
Ralphs ranch house overlooking I-5, 1965.	S/O '65 p31
Gorman schoolhouse in 1913.	S/O '65 p21
Monument erected at Shell Oil Company's Alamitos No. 1, Long Beach.	S/O '66 p22
<b>Missions</b>	
Carmel Mission.	M/J '66 p39
Dolores--see <i>San Francisco de Assisi</i>	
La Purisima Concepcion	
Fountain replacing original built by founders of the mission.	M/J '45 p18
Ruins of mission before restoration work.	M/J '45 p18
Restored exterior, Mission La Purisima Concepcion.	M/J '45 p18
La Purisima Mission bell tower.	M/J '66 p17
San Antonio de Padua in early days of its decay.	J/A '45 p15
Remains of Mission San Antonio de Padua ca. 1945.	J/A '45 p15
Bell of Mission San Antonio still in tower.	J/A '45 p29
San Buenaventura, restored facade.	M/A '45 p10
Ruins of aqueduct project at the mission.	M/A '45 p11
Entrance to Mission San Buenaventura.	M/A '45 p12
San Carlos Borromeo, as seen from courtyard.	N/D '45 p30
San Diego de Alcalá, cross marking original site of.	S/O '44 p5
Courtyard in Mission San Diego de Alcalá showing ancient walls.	S/O '44 p5
Exterior of Mission San Diego de Alcalá showing restored tower.	S/O '44 p6
San Fernando Rey de Espana, facade.	J/F '45 p12
Arches with columns of San Fernando's arcade.	J/F '45 p11
Old walls of mission before restoration [ca. 1930s].	J/F '45 p12
Mission San Fernando, fountain and gardens.	J/F '45 p13
San Francisco de Assisi [now Mission Dolores] exterior ca. 1946.	M/A '46 p19
Chapel structure before restoration.	M/A '46 p18
San Francisco Solano, restored exterior.	M/J '46 p17
Old mission bell at entrance to Solano Mission.	M/J '46 p19
San Gabriel Arcangel, restored exterior.	J/F '45 p9
Ancient grape arbor of San Gabriel Arcangel.	J/F '45 p9
Old Mission bells of San Gabriel Arcangel.	J/F '45 p10
San Jose de Guadalupe, old etching of.	M/A '46 p15
Mission San Jose de Guadalupe after restoration.	M/A '46 p16
Vine-covered arbor entrance to San Jose de Guadalupe.	M/A '46 p17
San Juan Bautista, exterior of.	N/D '45 p27
Mission San Juan Bautista from spot on gardens.	N/D '45 p28
San Juan Capistrano exterior, showing garden and fountains.	N/D '44 p9
Ruins of original mission, destroyed by earthquake in 1812.	N/D '44 p9
Interior of chapel at Mission San Juan Capistrano.	N/D '44 p21
Courtyard of Mission San Juan Capistrano showing old mission bells.	N/D '44 p21

# **HISTORIC LANDMARKS & MONUMENTS, Continued**

San Luis Obispo de Tolosa, exterior.	J/A '45 p12
Ancient doorway of Mission San Luis Obispo de Tolosa.	J/A '45 p13
San Luis Rey de Francia	
Exterior, on which considerable restoration work has been done.	N/D '44 p7
Courtyard of Mission San Luis Rey de Francia.	N/D '44 p8
San Luis Rey de Francia near Oceanside.	M/J '66 p18
San Miguel Archangel, restored exterior.	S/O '45 p16
Restored chapel of Mission San Miguel.	S/O '45 p17
Gardens at Mission San Miguel.	S/O '45 p18
San Rafael Archangel, wash drawing of.	M/J '46 p15
Church which stands on the original site of mission in San Rafael.	M/J '46 p16
Santa Barbara, exterior.	M/A '45 p13
Gardens of Mission Santa Barbara.	M/A '45 p13
Fountain in front of Mission Santa Barbara.	M/A '45 p30
Franciscan Padres-garbed visitor guide at.	M/J '66 p17
Santa Clara de Assisi, old etching of.	J/F '46 p11
Church which, along with University of Santa Clara, occupies site of original Mission Santa Clara de Assisi.	J/F '46 p12
Portion of the ancient adobe walls of Mission Santa Clara.	J/F '46 p13
Olive tree planted by padres when Mission Santa Clara was founded.	J/F '46 p14
Santa Cruz, old etching of.	J/F '46 p8
Old Mission Church, erected on site of old Mission Santa Cruz.	J/F '46 p9
Historical marker designates site of Mission Santa Cruz.	J/F '46 p10
Santa Inez, restored exterior.	M/J '45 p15
Chapel of Mission Santa Inez.	M/J '45 p16
Archer along corridor, Mission Santa Inez.	M/J '45 p17
Soledad, ruins of ca. 1931, and ca. 1945.	S/O '45 p19
Monterey Co.	
Kitchen of Stevenson House, Monterey State Historical Monument.	M/J '66 p38
Nevada Co.; Pioneer [Donner] Monument.	M/J '46 p5
Gov. Emmett Boyle (Nevada), Gov. William D. Stephens (California), and surviving members of Donner Party at 1918 dedication of monument.	M/J '46 p6
Riverside Co.	
False epitaph on boulder along I-215 [US 395] near Temecula.	J/F '49 p33
Temecula; adobe where treaty was signed with [Cocomahra] Indians in 1852.	J/A '51 p6
Plaque placed on building by California Centennials Commission.	J/A '51 p6
San Bernadino Co.; "Madonna of the Trail" monument on Old Emigrant Trail.	S/O '50 p39
San Luis Obispo Co.; Sen. Elmer S. Rigdon monument	
Gov. Merriam placing wreath on monument at dedication.	Jul '37 p3
Santa Barbara Co.	
Fremont-Foxen Monument, San Marcos (Gaviota) Pass	
Inscription on Fremont-Foxen monument.	S/O '50 p43
Monument at grave of Foxen.	S/O '50 p43
Fremont and Foxen descendants at Fremont-Foxen memorial monument.	S/O '50 p43
Solano Co.	
Benicia, historic former State Capitol	
Gov. and Mrs. Goodwin J. Knight with State Park Commissioner in period dress at dedication of restored State Capitol, Benicia.	M/J '58 p26
Visitors outside the restored Capitol at Benicia.	M/J '58 p28
Site of Pena Adobe adjacent to I-80 near Vacaville, built in 1842.	J/F '65 p50
Tuolumne Co.; gold discovery monument near Jamestown (Rt. 108) [Rt. 13].	S '41 p19

# **HISTORY: PEOPLE, PLACES, & EVENTS**

Alameda Co.; historic Sather Gate entrance to UC Berkeley.	M/J '66 p35
Del Norte Co.; Crescent City, 1855.	M/J '64 p3
Humboldt Co.; Eureka in 1910.	M/J '64 p11
Inyo Co.	
Panamint City, showing ruins of kilns.	J/F '51 p20
Ballarat ghost town and "Seldom Seen Slim," prospector and only inhabitant.	J/F '51 p20
Los Angeles Co.	
Long Beach bathing beach and amusement area, 1923.	S/O '66 p24
Long Beach Harbor area showing pipes for dredging operations, 1926.	S/O '66 p24
Newbury Park Stage Station in 1887.	J/A '50 p29
Uncle Sam's Camel Train, which once traveled through San Fernando	
[Fremont] Pass, drawing of.	S/O '54 p37
Mendocino; 19th century structures.	M/J '66 p6
Mono Co.; Ghost town of Bodie.	M/J '66 p29
Placer Co.; Gold Rush-era buildings in town of Dutch Flat.	M/J '66 p44
Riverside Co.	
Old adobe depot of Butterfield Overland Stage at Temecula, converted	
to grain storage warehouse.	J/F '49 p34
Granite curb stone remnant serving as ranch fence post, Temecula.	J/F '49 p54
San Benito Co.	
Ancient pepper tree in garden of one of San Juan Bautista's old buildings.	M/J '66 p38
Silver nameplate of Angelo Zanetta on Zanetta House, San Juan Bautista.	M/J '66 p38
San Bernardino Co.; Cajon Pass lower toll house just north of Blue cut ca 1870s.	M/J '53 p7
San Diego Co.	
Hotel del Coronado.	M/J '66 p20
Old adobe stage station at Warner's Ranch.	S/O '50 p47
"Old Spanish Lighthouse" at Point Loma, built in the 1850s.	M/J '66 p19
Towers of 1915 Exposition at San Diego's Balboa Park.	M/J '66 p21
Santa Barbara Co.; restored Sisquoc church.	S/O '50 p43
Shasta Co. Court House; Whiskeytown Hotel at Schilling, built in 1852.	N/D '47 p6
Siskiyou Co.; Henley [formerly Cottonwood] stage station, site of	J/F '50 p13
Sonoma Co.; California Northwestern Railroad Station at Sebastopol, early 1900s.	M/J '64 p8
Transportation methods, Redwood Hwy. 19th century--early 20th century	
Eight-horse team and double freight wagon in Del Norte Co. ca 1900.	M/J '64 p5
Four-horse team and stage coach at Old Shasta, 1912.	M/J '64 p5
Horse team towing Model T across Eel Rvr. from Scotia to Rio Dell, early 1900s.	M/J '64 p2
Light stagecoach and surrey on Redwood Hwy. between McDonald and Hopland	
in southern Mendocino Co., 1900s.	M/J '64 p7
Line drawing from photograph of Pacific Lumber Co.'s railroad between Scotia	
and Alton, ca. 1890.	M/J '64 p4
Pack train making up for trip from Humboldt Bay into Hoopa Valley ca. 1880.	M/J '64 p4
Orick (Humboldt Co.) ca. 1925 showing motorized "stage" which ran between	
Crescent City and Eureka.	J/A '64 p30
Damaged car on road, early 1930s.	J/A '64 p24
Trinity Co.	
Restored chapel at Ft. Ross State historical park.	M/J '66 p6
Joss House in Weaverville; Alter at Joss House.	M/J '66 p10
Gold Rush-era buildings with outside spiral staircases, Weaverville.	M/J '66 p10
Yolo Co.; steam engine put on permanent display	
Moving steam engine across highway	M/J '57 p38
Final repose in Yolo Co. Fairgrounds; Driving Golden Spike.	M/J '57 p39

## INFORMATIONAL SERVICES

### Exhibits by Division of Highways

California State Fair	S/O '47 p26; S/O '61 p72
Division of Highways publications exhibit on display at State Library.	J/A '62 p55
"Freeways For You" display, 1959.	N/D '59 p46
Highway progress model displayed on Treasure Island.	Apr '39 p10+
National Highway Week exhibits.	M/J '62 i.cvr.
Display in front window of store in Bishop for National Hwy. Week.	J/A '63 p44
National Highway Week exhibit at LAX.	J/A '63 p42
Freeway exhibit on display in San Luis Obispo Public Library.	J/A '63 p43
National Orange Show (San Bernadino) exhibit at.	M/A '47 p16+
Pasadena's Diamond Jubilee celebration, exhibits on display during.	J/A '61 p66
Sacramento freeways model on display at State Capitol.	M/A '64 p59
Scale models of freeway interchanges and other structures planned for	
Sacramento area and San Mateo Co. on exhibit at 1964 State Fair.	N/D '64 p62
Winter Sports Fair in San Francisco exhibit.	N/D '65 p62

### Films/Television

Station KTTV producer Roy Maypole interviewing Resident Engineer Haig	
Ayanon for "Sidewalk Superintendent" television program.	M/J '52 p19
Vacuum cleaner machine being filmed for television.	M/J '52 p25

### Public Relations

Boy Scouts distributing leaflets regarding freeway construction.	S/O '64 p42+
Flagman handing motorists a leaflet explaining reasons for traffic delay.	N/D '61 p62

## LANDSCAPE & LANDSCAPE MAINTENANCE

### Bay Bridge Approaches, I-80 [East Shore Hwy.]

Before: dredged sand fill between east end of bridge--toll plaza;	
after: ice-plant ground cover on bay side and center strip.	D '39 p19
Cypress Ave. approach before/after appropriate plantings	D '39 p17
Dumps and industrial district screened by tree planting.	D '39 p17
Evergreen trees and lawn shrubs at 5th St. Plaza approach, S.F.	D '39 p19
Ice-plant ground cover along Berkeley Aquatic Park.	D '39 p18
Improved roadside appearance due to tree and shrub plantings.	D '39 p18
Former wagon track road following natural landscape ca. 1912-1915.	J/F '61 p3

### Freeways Landscaping, general

Landscaping separating roadway from residential area.	N/D '66 p22
Mature landscaping	N/D '61 p13; J/A '63 p4
New section to be planted being checked against plans	M/A '61 p45
Highway maintenance station with landscaped grounds, Oceanside.	Jan '38 p22

### Humboldt Co.; Lupineseed plantings

Close-up of Lupine seeds.	S/O '66 p37
John Brown, Sr., Dist. 1's "Johnny Lupineseed."	S/O '66 p37
Lupine growing along roadside of US 101 near Eureka.	S/O '66 p37
Iceplant cuttings being made on piecework basis.	M/A '61 p47
Crew planting iceplant cuttings in median of Santa Ana Fwy near Tustin.	M/A '61 p47
Soil kept in place with ice plant and natural grasses.	S/O '53 p30

### Interchanges, landscaping and

Alameda Co.; I-880 [Rt. 17] interchange near Hayward.	N/D '64 p46
Four-level interchange, Los Angeles.	M/A '64 p23; J/F '67 p6
Glendale-Golden State Fwy. Interchange.	J/F '67 p7
Harbor--Santa Monica Fwy. Interchange planted in 1962.	J/F '67 p6
Landscaping architects discussing planting of interchange.	M/A '61 p40

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**LANDSCAPE & LANDSCAPE MAINTENANCE, Continued**

San Bernadino Fwy. (I-10) landscaped interchange	M/J '61 p73
San Diego Fwy., donated palm tree being planted	J/F '65 p59
San Diego; I-5/Rt. 163 [US 395] four-level interchange.	N/D '64 p14
Santa Ana--Long Beach Fwy. interchange.	M/A '61 p45; N/D '64 p46
Sonoma Co.; redwoods planted at US 101 interchange, Santa Rosa.	S/O '64 p14
Kern Co.; landscaped US 99 on-ramp	J/A '61 p34
<b>Litter Removal--See also EQUIPMENT</b>	
Litter on roadside next to "Unlawful to Dispose of Litter" sign.	N/D '61 p23
Rotary sweeper cleaning gutters on Bayshore Fwy. in San Mateo Co.	N/D '65 p23
Street sweepers: weed and brush flail; Rotary flail in operation.	M/J '55 p31
Vacuum cleaner; trash on roadside on Rt. 1 between 7th St. and Anaheim St. in Long Beach, before/ after vacuuming operations	N/D '51 p46
<b>Los Angeles Co.</b>	
<b>Arroyo Seco Parkway (Rt. 110)</b>	
Marmion Br. section before and after planting.	N/D '44 p25
Orange Grove Ave. section before, during, after planting	J/F '45 p22+
Prospect Ave. overhead section before and after landscaping.	J/F '45 p24
Retaining walls built around existing native sycamores.	M/A '61 P46
slope and center divider plantings.	D'40 p14, 15
Golden State Fwy. (I-5) [US 99]; Landscaped section in Griffith Park.	N/D '62 p66
Group looking over landscape plans.	J/F '65 p59
Harbor Fwy (I-110) landscaping between business and.	M/A '64 p24
Landscaped section planted in the mid-1950s.	J/F '67 p5
<b>Hollywood Fwy. (US 101) [Cahuenga Pass Fwy]</b>	
Landscaped section near Glendale Blvd.	J/F '67 p7
Landscaped section through Cahuenga Pass.	M/J '65 p39
Pilgrimage Br. section before and after landscaping.	N/D '44 p24
Slope control in Cahuenga Pass section.	M/A '61 p46
<b>Mr. O. Henry Jr. of W. Federal S&amp;L Assoc., Panorama City with</b>	
Girl Scouts and one of eucalyptus trees donated by the S&L .	J/F '66 p43
Rt. 134 [Colorado Fwy.]; landscaped section near Pasadena.	N/D '62 p12
San Bernadino Fwy. (I-10); landscaped section near Covina.	J/F '61 p9
<b>San Diego Fwy. (I-405)</b>	
L.A. area Girl Scouts planting pines on cut slopes.	J/F '66 p43
Palm tree being transported down PCH to San Diego Fwy.	J/F '65 p59
Plantings along retaining wall	M/A '61 p44
Vincent Thomas Br. in San Pedro, landscaped approach.	J/F '67 p4
<b>Maintenance of Landscaping</b>	
Maintenance truck watering oleanders along median strip.	J/A '60 p46
Replacing a dead roadside plant.	M/J '61 p72
Trimming median with power equipment.	M/J '61 p71
Trimming overhanging foliage from tree along highway.	N/D '62 p26
Weeding roadside while watering basin around young plant fills.	M/J '61 p70
Marin Co., US 101; Waldo Grade after widening ca. 1955 and ca. 1965, showing growth of natural vegetation and planted landscaping.	M/J '65 i.cvr
<b>Mariposa Co.; Redbud plantings</b>	
Redbud seedlings awaiting planting on Rt. 140.	J/F '66 p34
Gov. Edmund Brown, William Brady (promoter of redbud planting effort) and official party at first redbud planting ceremony.	J/F '66 p34
Brady preparing soil for first redbud planting.	J/F '66 p34

## LANDSCAPE & LANDSCAPE MAINTENANCE, Continued

### Modesto Co.

Crane lowering olive tree into new home at Kansas Ave. interchange  
Shade trees salvaged from I-5 construction.  
Transplanted palm.

S/O '65 p46  
S/O '65 p46  
S/O '65 p47

Monterey Co.; Carmel Bay as seen from Rt. 1, with Monterey Pine and Cypress planted in the 1930s.

S/O '66 p10  
May '41 p9

Orange Co.; Costa Mesa business street beautified by local citizens.

May '38 p13

Outdoor Advertising; samples of permissible copy for advertising signs.

M/J '61 p70

Placer Co.; Roseville; neatly trimmed section of I-80.

M/J '59 p35+

Riverside; Palms transplanted on Riverside Fwy. (Rt. 91)

### Roadside Vegetation, Control of

Brush Cutters/Choppers being demonstrated in Washington DC

M/A '50 p58

Chopper drawing brush into hopper; material being expelled.

S/O '51 p23

Chips and shavings after expulsion.

S/O '51 p23

Cutter making a first pass at the bank.

M/A '50 p58

Feeding trees into chopper.

S/O '51 p22

High slopes cleared of bulging growth with mower.

M/A '50 p59

Newly developed cutter trimming ice plant along roadside.

M/J '65 p61

Slope before and after mowing brush treatment.

M/A '50 p59

### Fire hazard potential

Burning oil-sprayed roadside growth.

M/J '43 p5

Disking roadside areas beyond ditchline to establish firebreak.

M/J '43 p4

Dry vegetation means that fire hazard is high.

M/A '50 p38

Firebreak behind guard rail.

S/O '46 p7

Firebreaks

S/O '46 p6+

Fire-hazard-control strip formed by "spray and burn" method.

M/A '50 p38

Fire-hazard-control strip formed by the soil sterilization method.

M/A '50 p39

Mowing tall, dry growth, thus reducing fire hazard.

M/J '43 p3

Roadside planting of Mesembryanthemum edule effectively controls weeds and reduces fire hazard.

M/A '50 p36

Spraying roadside slope with diesel oil prior to burning.

M/J '43 p3

Spray proportioner in operation; Rear view of spray proportioner.

M/J '65 p62

### Weed Eradication

Results of seasonal application at beginning of second season.

M/A '51 p26

Soil sterilization application north of San Bernardino.

M/A '51 p27

Soil stabilization as means of on Creek City highway.

M/A '51 p26

### Sacramento Co.

Improved swimming area at Granite Bay.

S/O '60 p61

Improved swimming area at Beals Point.

S/O '60 p62

Mormon Island section of Folsom Lake State Park.

S/O '60 i.cvr

M St. Bridge approach improved with tree/shrub planting.

S '39 p18

N. Sacramento Fwy. [US 40-99E] before and after landscaping.

J/F '59 p55

San Benito Co.; US 101/Rt. 156 [Rt. 22] junction [Prunedale Cut-off]

Campanile and surrounding roadside beautification efforts

Jan '38 p6, 7

Cross, surrounded by adobe walls.

Jan '38 p8

San Bernardino Co.; Joshua Tree on I-40 [US 66]

S/O '50 p107

San Diego; Cabrillo Fwy. (Rt. 163) [US 395]

Palm trees salvage during construction operations

M/A '61 p63

Salvaging palm trees from median strip.

S/O '60 p16

Transplanted palms salvaged from right-of-way.

M/A '61 P42;

San Francisco; Bayshore Fwy. (US 101), landscaped section.

N/D '61 i.cvr

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**LANDSCAPE & LANDSCAPE MAINTENANCE, Continued**

San Luis Obispo, US 101	
Dense growth of drought resistant plants.	M/J '61 p70
Landscaped section through San Luis Obispo.	M/A '61 p43; S/O '66 p10
Santa Barbara; tree lined, winding section of US 101 ca. 1920s.	J/F '61 p7
Santa Cruz; Roadside planting treatment on section of Rt. 1.	J/F '61 p8
Seedlings for use in freeway landscaping being transplanted.	N/D '62 p65
Sierra Nevada, I-80	
Dike and cleared area outside it on Sierra Nevada section.	M/J '61 p70
Sierra Nevada road [unidentified], 1941.	J/F '61 p9
Slope Rounding, before and after views [unidentified locale]	S '39 p19
Scraper and bulldozer rounding and leveling top cut of slope.	S '39 p20
<b>Trees</b>	
Black walnut trees on "Winters-Davisville Rd." in 1905 and 1961.	J/F '61 p2
Building detour through orange grove and protected trees.	Jun '37 p23
Eucalyptus planting	S/O '48 p36
Joshua trees and sparse undergrowth in southeast section of state.	N/D '49 p37
Joshua trees north of Cajon Pass (San Bernardino Co.).	M/J '52 p5
Mexican fan palm roadside tree planting in Riverside ca. 1930.	J/F '61 p6
Native California sycamore trees planted along roadside of San Jose--Oakland highway.	F '43 p16
Oak trees on highway in Monterey Co. being protected from erosion.	Aug '37 p23
Palms being planted on Redlands Fwy. (I-10).	S/O '62 p11
Palo Verde trees growing on Rt. 86 [US 99] in Imperial Valley.	J/A '61 p38
Parkinsonia trees planted along roadway between Victorville and Barstow.	S/O '65 p16
Redwood tree on Redwood Hwy. (US 101), Humboldt Co.	S/O '45 p2
Redwood trees and luxuriant undergrowth near Dyerville, Humboldt Co.	N/D '49 p37
Coast redwoods and ferns at Prairie Creek Redwoods State Park.	M/J '66 p4
Clump of redwoods containing world's tallest tree, discovered in 1963.	M/J '66 p4
Safety line technique demonstrated by tree maintenance crews.	M/J '61 p69
Scotch pine seedlings in flats in state nursery.	J/A '61 p35
San Bernardino Co.; Rt. 18 [Rt. 43], Panorama Pt. after 1929 fire	O '37 p20
Native shrubs and trees on I-15 near Halloran Summit.	S/O '65 p16
Natural beauty of area restored after tree planting.	O '37 p20
Tree doctors at work.	F '43 p17
<b>Tree trimming</b>	
Clearance restricted roadside trees before/after trimming.	Jan '42 p3
Eucalyptus trees on highway before and after top work.	Jan '42 p4
Improved saw handle; improved saw handle in operation.	M/J '46 p12
Increased vision on highway curve due to tree trimming.	Jan '42 p28
Operations underway on US 101 south of Camarillo, Ventura Co.	M/J '46 p12
Palm trees lining highway before and after trimming.	Jan '42 p3
Power-Driven tree cutting equipment., demonstration of.	J/A '46 p30
Trees planted along Rt. 99 near Wheeler Ridge (Kern Co.), ca. 1922.	J/F '61 p5
<b>Urban Renewal; Los Angeles</b>	
Dilapidated building in Bunker Hill section	S/O '61 p38
Model of planned Bunker Hill Redevelopment Project.	S/O '61 p39
Yolo Co., I-80; trees, shrubs planted at bridge approaches	S/O '53 p29; M/A '61 p46



## LEGISLATION

BATSC; Gov. Edmund Brown signing BATSC bill. J/A '65 p38  
 Collier-Burns Hwy. Act. being signed by Gov. Warren as Legislative members look on. J/A '47 p2  
 Secretary of State Frank M. Jordan poses with new officials of the Dept. of Water  
 Resources before swearing them in. J/A '56 p71  
 SCR 62 Report on county and city street deficiencies  
 Members of Technical Advisory Committee. S/O '58 p3; N/D '60 p49  
 Presentation of SCR 29 freeway report to the Joint Interim Committee. S/O '58 p1  
 Smog; Gov. Edmund Brown signing key piece of auto smog legislation. S/O '66 p17

## LITIGATION/LEGAL

Access rights; parcel of land between Arbuckle and Williams on I-5 [Rt. 99W]  
 involved in access rights litigation in Colusa Co. M/A '49 p10+  
**Gold-bearing potential case**  
 Equipment stuck in mud. M/A '55 p44  
 Jib operating sluice box. M/A '55 p45  
 Materials Dept. personnel using air hoist, handling the bucket line. M/A '55 p45  
 Engineer Erich and Atty. John Horgan riding "commuters' special" across river. M/A '55 p45  
 Operations in full swing; Caissons at job site. M/A '55 p47  
 Freeway-related cases  
*Holloway v. Purcell*  
 I-80 [US 40] near Sacramento, center of *Holloway v. Purcell* freeway case. S/O '64 p56  
*People v. Horsford*  
 Intersection at Ash St. and 10th Ave., San Diego indicating portion  
 along which access rights were acquired in *People v. Horsford*. J/F '49 p35  
 Corner of 10th & Ash Streets, San Diego, before construction of motel. M/J '51 p40  
 Same corner after construction of motel. M/J '51 p40+  
 Scale model built for right-of-way property case. N/D '66 p30

## MAINTENANCE--See also SNOW; EQUIPMENT; LANDSCAPE & LANDSCAPE MAINT.

### Maintenance Department

Maintenance Dept. personnel, group photo. D '37 p24  
 Maintenance Dept. executives, group photo 1942. Mar '42 p13  
 Maintenance crew beginning work on section of Bayshore Fwy in S.F. J/A '60 p45  
 Maintenance stations--See also SNOW  
 Maintenance station in N. Hollywood near US 101 (Ventura Fwy.). N/D '60 p17  
 Maintenance station with landscaped grounds, Oceanside. Jan '38 p22  
 All American Canal maintenance station and yard on old section of I-8 [US 80]. J/A '61 p17  
 Lassen Co.; US 395 [Rt. 73] looking toward Secret Valley maintenance station. S/O '46 p13  
 Maintenance work on overhead light, US 50 east of Sacramento. J/A '60 p44  
 Patching pavement on Rt. 99 [US 99E] near Chico. N/D '61 p24  
 Patching section of I-880 [Nimitz Fwy.] in Alameda Co. N/D '65 p21  
 Radio telephone installation in maintenance truck. S/O '50 p157  
 Removing debris from an overturned truck on a freeway. J/A '61 p54  
 Repairing chain link fence along I-405, San Diego Fwy. in Los Angeles. M/J '65 p39  
 Replacing section of fence on median. J/A '61 p55  
 Slide removal operations using bulldozer (Dist. 7) J/A '61 p53  
 Using giraffe and personal hoist to make freeway sign repairs. N/D '65 p24  
 Using personal hoist to service highway lighting. N/D '65 p24

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

## **MOTOR VEHICLES**

### **Driver Opinion Study**

- Highway Transpiration Agency administrator, California Traffic Safety Foundation executive vice president, and Standard Oil Co. president H.G. Vesper, with check for grant to conduct special driver opinion survey. S/O '64 p67
- New automobile being transported by train. J/F '67 p21
- Smog-control
  - Chrysler Cleaner Air Package engine. S/O '66 p15
  - Special committee on vehicle pollution control inspecting emission testing equipment at Detroit auto plant. S/O '66 p16

### **Truck turns on short-radius curves, testing for**

- Apparatus used for marking race on pavement in use on front overhang of bus, and rear wheel of trailer. M/A '50 p14
- Tractor-truck, semi-trailer, and trailer; Truck and trailer. M/A '50 p15
- Tractor-truck and semi-trailer; Two axle bus. M/A '50 p15
- Extensible semi-trailer used in making tests on extra length vehicle. M/A '50 p30
- Rear axle assembly of mono-trailer. M/A '50 p30

### **Truck usage, increase of during WWII**

- Double-trailer truck on highway. J/A '43 p2
- Cement in large metal tanks being hauled by truck. J/A '43 p3
- Truck and trailer combination hauling gasoline. J/A '43 p4
- Agricultural products being moved by truck and trailer. J/A '43 p4
- Truckloads of hay. J/A '43 p5
- Fully-loaded trucks on highway. J/A '43 p18

### **Types of heavy vehicles using California highways.**

S '38 p14+

### **Weight-Weigh stations**

- CHP truck scales in operation near I-5/Rt. 126 interchange. S/O '65 p23
- Coyote scale, Santa Clara Co., with truck on scale and two vehicles preparing to unload portion of excess load. N/D '47 p2+
- Equalizing beam and load-o-meters in place in concrete load-o-meter pit. M/J '45 p1
- Weighing third axle of gasoline transport combination. M/J '45 p2
- Weighing first axle of butane gas transport combination. M/J '45 p2
- Measuring length of tank truck and scale at Hercules scale. N/D '47 p5
- Officials checking weight of large truck and trailer equipment on highway. N '41 p5
- Pavement damaged by overweight loads. J/F '55 p10+
- Truck in midst of unidentified collapsed bridge span. J/F '55 p13
- Truck-trailer combination being checked for gross weight and overall length at Carquinez Br. scale. N/D '47 p4
- Freight truck and trailer being measured at Carquinez Br. N/D '47 p5
- Truck weighing station on I-5 [US 99] near Wheeler Ridge in Kern Co. N/D '61 p24
- Weighing and brake testing station near Ft. Tejon. (Kern Co.) Mar '38 p24
- Roadway protected by guard rail provided for brake testing runway. Mar '38 p24
- Close-up view of scale house. Mar '38 p24

## **NATIVE AMERICANS**

- Armer, Laura Adams, famed artist and writer, poses before ancient petroglyphs found on rocks near historic Walker Pass Rd. in Kern Co. M/A '52 p50
- Chumash in authentic costumes at Simi Valley Fwy. ground-breaking celebration. S/O '66 p30
- Early "Wickiup" at Mono Pass. S/O '50 p90
- Morongo Braves baseball team in uniform. J/A '49 p60
- Lulu Martin, official scorekeeper for Morongo Braves. J/A '49 p39

## **NATURAL DISASTERS--See also FLOODING**

- Boulders blocking Rt. 178 [Rt. 57] (Inyo-Kern Co.) following earthquake jolts. M/J '46 p30
- Imperial Valley earthquake**
- Damage to schools
    - Ceiling dropped to floor in one old school. Jun '40 p24
    - New Brawley Union High School buildings, undamaged by tremor. Jun '40 p24
  - Damage to state highways**
    - Settlement of 18 inches in the approach to New River Br. Jul '40 p27
    - Pavement shattered west of Brawley. Jul '40 p27
    - Pavement cracked east of Ash Canal. Jul '40 p27
    - 16 in. offset in pavement on Rt. 27. Jul '40 p27
    - Timber piles shoved from beneath caps of New River Br. Jul '40 p27
    - Horizontal shift of 9 feet where fault line crosses Rt. 202. Jul '40 p27
  - Minnie A. Caine* before burning, wreckage of. Apr '40 p17
  - All that remained of *Minnie A. Caine* after burning. Apr '40 p17
  - Tidal currents threaten Coast Hwy. near Santa Monica Bay due to shipwreck. Apr '40 p26

## **PAVEMENT & PAVING**

### **Aggregate gradation control, new method of installed**

- View of continuous mixer from product hopper tower. M/A '51 p21
- View from side opposite the mixer. M/A '51 p22
- Arrangement of weighing hopper under the gradation control unit. M/A '51 p22
- Control gate for one of the bins; Sample reduction device. M/A '51 p23

### **Armor coat construction**

- Steel broom on motor grader blade used for lighter spread of screenings. N/D '44 p13
- Steel drag broom being towed by motor grader. N/D '44 p13
- Rollers following the drag broom. N/D '44 p14
- Brooming medium screenings with steel drag pulled by light tractor. N/D '44 p14
- Asphalt shoulders being completed on new freeway. J/F '66 p36

### **Asphalt subsealing**

- Asphalt subsealing crew at work. M/J '46 p8
- Ames dial used to record pavement raise in asphalt jacking. S/O '46 p12
- Asphalt heating tanks. M/J '46 p10; S/O '46 p11
- Nozzles, types of used in asphalt subsealing. M/J '46 p9+; S/O '46 p8
- Subsealing crew with equipment. M/J '46 p13
- Subsealing done by two nozzle-men using one asphalt heating unit. S/O '51 p34
- Test holes with thermometer inserted to determine flow of asphalt under pavement. S/O '46 p12
- Two hammers drilling holes for asphalt subsealing. M/J '46 p10
- Asphaltic emulsion seal being applied to cement treated subgrade. N/D '52 p13

### **Bituminous surfaces, hauling and placing of**

- Spreader box in position for next truck to use. S/O '54 p53
- Spreader box used with the bottom dump hauling unit. S/O '54 p53
- Windrow left by bottom dump hauling unit and spreader box. S/O '54 p53
- Equipment string for placing surfacing course. S/O '54 p54
- Loader and paver in operation on surfacing course. S/O '54 p54
- Gap in windrow to control quantity being fed to paving machines. S/O '54 p55

### **Cement distribution in bases tested**

- Acid-based titration test for cement distribution in bases. N/D '59 p8
- Layout for constant neutralization procedure. N/D '59 p8
- Field kit for acid-base titration test. N/D '59 p11

Cement plants; typical California cement plant situated at Redwood City. May '40 p29

## PAVEMENT & PAVING, Continued

### Cement-treated bases

- Cement treatment 1937. M/J '55 p40
- Cement treatment 1955. M/J '55 p41
- Truck dumping cement stabilized mix in bulldozer spreader box. Mar '41 p19
- Bulldozer equipped with forward steel wings attached to ends of blade. Mar '41 p19
- Wheels spreading mixture approximately 14 inches deep on roadway. Mar '41 p19
- P&H Stabilizer processing cement stabilized base (US 101, Humboldt Co.). J/F '51 p54
- P&H Stabilizer in operation. J/F '51 p55+
- Equipment dry mixing cement and gravel during successful tests in District 1. J/F '51 p43
- Modified cement treated base experiment: original surface after scarifying. J/F '46 p29
- Windrow after processing. J/F '46 p29
- Towed frame developed to scarify and windrow in-place material. M/J '55 p43

### Cement treated bases/subgrades, improved equipment, control methods

- Sizing windrow of mineral aggregate for road-mixed cement treated base. J/F '61 p49
- Cement spreader truck. J/F '61 p49
- Pugmill-type mixer used in road-mixed cement treated base operation. J/F '61 p50
- Apparatus for obtaining cores of completed pavement/bases to measure thickness. J/F '61 p51
- Front view of custom-built, cement treated base road mixer; Rear view of same. J/F '61 p52
- Land-plane type grader. J/F '61 p52
- Paving machines placing plant-mixed cement-treated base. J/F '61 p53

### Cement treated bases/subgrades, slipform paving and

- Automatic road-building machine cutting subgrade on untreated base. S/O '60 p45
- Windrows of untreated base material for layer of cement-treated subgrade. S/O '60 p45
- Cement distributor truck spreading cement on windrow of untreated base material. S/O '60 p47
- Cement treated subgrade operations showing road mixing and initial rolling. S/O '60 p45
- Cement treated subgrade in vicinity of Avenue Pico Undercrossing. S/O '60 p45
- Cement work in progress on Rt. 82 and Rt. 87 in San Francisco. N/D '65 p3

### Concrete durability tests

- Cracks in sea wall at Santa Barbara; Cracked sea wall along coast in Ventura Co. J/F '48 p26
- Pier at north end of main Ferry Building, S.F. Harbor, constructed in 1894. J/F '48 p32+
- Right face of pier showing honeycomb but little if any concrete disintegration. J/F '48 p32
- 1912 precast reinforced pile jackets, Pier 17, S.F. Harbor. J/F '48 p34
- 1912 concrete in piles, bulkhead and underside of floor of a portion of Pier 17. J/F '48 p35
- 1903 concrete cylinders under N. Annex to the Ferry Building, S.F. J/F '48 p36

### Concrete experiments conducted by Materials and Research Dept.

- Application of modified epoxy adhesives in bridge repair. S/O '57 p18
- Automatic equipment for freezing and thawing test for concrete. S/O '57 p17
- Concrete aggregate samples being prepared for shipment to District Lab. S/O '65 p42
- Sampling aggregate base from windrow. S/O '65 p45
- Core drill used to study pavement performance. S/O '57 p15
- Determining compressive strength of concrete. S/O '57 p15
- Determining fineness of portland cement. S/O '57 p15
- Gages and recorder to measure length changes of concrete as it freezes. S/O '57 p17
- Linear traverse device used in determining entrained air content of hardened concrete. N/D '62 p33
- Measuring electrical resistivity of concrete. N/D '64 p29
- On-the-job test to determine the weight of portland cement concrete. N/D '60 p25
- Concrete Pavement; Calcium chloride admixture
- Bags of flaked calcium chloride spotted on grade. M/A '52 p21
- Adding flaked sodium chloride to mix. M/A '52 p21

## PAVEMENT & PAVING, Continued

### Concrete pavement warp

Compacted imported borrow removed to show membrane seal intact.	F '38 p8
Progressive operations in laying Portland cement.	F '38 p9
Membrane seal in place ready for imported borrow.	F '38 p9
Motor grader spreading imported borrow.	F '38 p9
Imported borrow in place on membrane seal, ready for grading, paving operations.	F '38 p9
Device for measuring amount of pavement warp at expansion joints.	Mar '38 p20
Device in use.	Mar '38 p28

### Concrete uniformity, mixer tests conducted

Crew carries on test to determine percentage of air in mixture of concrete.	M/J '60 p60
General arrangement of test area.	M/J '60 p60

### Crack and Joint Sealing for concrete pavement

Longitudinal joint sealing operations and equipment.	M/A '47 p13
Old and new type of assembly used for joint sealing.	M/A '47 p13
Full circulating type assemblies with swivel joints for longitudinal joint sealing.	M/A '47 p13
New type of assembly and nozzle used in joint sealing.	M/A '47 p14
New type of assembly using four swivel type Chikson valve.	M/A '47 p14

### Electronically controlled and guided slip form paver in action.

Equipment being used on Redwood Hwy. near Laytonville, Mendocino Co.	J/A '60 p9
--	------------

### Fatigue ("alligator") cracks in pavement.

Equipment being used on Redwood Hwy. near Laytonville, Mendocino Co.	M/J '50 p46
--	-------------

### Finishing operations on Ventura Fwy. (US 101)

Equipment being used on Redwood Hwy. near Laytonville, Mendocino Co.	S/O '60 p41
--	-------------

Finishing operations on Ventura Fwy. (US 101)	M/J '60 p44
---	-------------

### Foundations

Army engineers inspect runway test pavement at Stockton field.	May '42 p2
--	------------

Engineer testing deflection of pavement under loads corresponding in footprint and contact pressure to those of heavy bombers.	May '42 p3
--	------------

### Reworking pavement foundations

Newly scarified pavement; texture of finished pavement.	N/D '50 p25
---	-------------

Applying asphalt softener through Gardner mixer.	N/D '50 p26
--	-------------

### Heavy-duty pavement breaker in operation.

Spreading first 4-in. lift of cement treated base on I-5, Tehama-Shasta Co.	J/F '65 p37
---	-------------

Spreading first 4-in. lift of cement treated base on I-5, Tehama-Shasta Co.	J/F '65 p38
---	-------------

### Lime stabilization

#### Experiment on cohesiveness of lime-treated clay.

Tank truck spreading lime slurry to avoid lime dust.	J/F '66 p36
--	-------------

Mechanical road mixing of lime with damp aggregate.	J/F '66 p36
---	-------------

Large tank truck and spreader used in laying dirt lime.	J/F '66 p36
---	-------------

Dry lime being converted into slurry in mixing tank.	J/F '66 p36
--	-------------

#### Highway treated with 2% lime in Aug., 1948, photographed April, 1949.

Failed section not treated with lime.	J/A '50 p7
---------------------------------------	------------

Spreading untreated base rock and agricultural bulk lime.	J/A '50 p7
---	------------

Mixing with pulvomixer and blade.	J/A '50 p8
-----------------------------------	------------

6-inch base material with penetration oil treatment placed Nov. 1948.	J/A '50 p8
---	------------

6-inch base material which went through winter without oil treatment.	J/A '50 p9
---	------------

Failed section which was not treated with lime; Appearance in March, 1950.	J/A '50 p11
--	-------------

### Mud jacking equipment in operation forcing cement treated loam under paving.

Drilling holes prior to mud jacking operations.	J/A '44 p11
---	-------------

Water being forced from underneath pavement by air pressure.	J/A '44 p12
--	-------------

### Paving operations by hand ca. 1914. Paving operations using machinery, 1961.

Paving operations by hand ca. 1914. Paving operations using machinery, 1961.	J/F '61 i.cvr.
--	----------------

### Paving operations on Corona Bypass section of Riverside Fwy. (Rt. 91)

Paving operations on Corona Bypass section of Riverside Fwy. (Rt. 91)	J/A '61 p28+
---	--------------

### Paving operations, Tehama Co.

Dumping and rolling cement stabilized base material on prepared subgrade.	O '40 p17
---	-----------

Operation of applying curing seal of asphaltic emulsion on prepared subbase.	O '40 p17
--	-----------

Finished base ready for more plant-mixed, machine spread asphaltic concrete.	O '40 p18
--	-----------

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**PAVEMENT & PAVING, Continued**

Paving operations using twin batch paver, mechanical spreader and mechanical tamper. N/D '52 p12  
Paving operations using Barber-Greene traveling plant. N/D '52 p12  
Pavement design, effect of inherent volume change on

Crack developed from unrestrained end of long unreinforced concrete pavement. J/F '48 p21

**Pavement experiments conducted by Materials and Research Dept.**

Compression test for determining strength of cement-treated base specimens. J/A '57 p61

Experimental installation of wire mesh to determine whether it will be effective in preventing cracks in asphaltic resurfacing. J/A '57 p62

Experimenting with bituminous binder containing rubber latex. (seal-coating) J/A '57 p63

Inserting test specimens in stabilometer prior to testing. J/A '57 p61

Making Benkelman beam deflection tests to find out how much a pavement is bent or stressed under heavy wheel loads. J/A '57 p65

Making centrifuge kerosene equivalent determinations. J/A '57 p60

Measuring skid resistance of pavement surface. J/A '57 p63

Performing tests on bituminous products. J/A '57 p60

Placing of Zoca to Wigmore asphalt test sections to determine their quality. J/A '57 p63

"Simulated traffic polisher" used to test various seal coat surfaces. N/D '60 p29

Small pressure tests to determine how much weight of base and pavement will be required to prevent sail from expanding. J/A '57 p61

Taking a sample of pavement base and subbase on a new section of highway. N/D '60 p29

Test installation of asphalt-latex seal coat to protect wooden bridge deck. J/A '57 p62

Test specimens cut from pavements by coring or sawing. J/A '57 p62

**Plant mixed surface, open graded**

Close-up of open graded plant-mixed surface showing typical surface texture. J/A '56 p14

Close-up of dense graded plant-mixed surface showing typical surface texture. J/A '56 p14

Rakers forming 1-ft. taper section on left, trimming longitudinal joint on right. J/A '56 p15

Paving open graded plant-mixed surface; Breakdown roller on fresh mat. J/A '56 p15

Advantages of an open graded plant-mixed surface. J/A '56 p16

Delineation characteristics of open graded plant-mixed surface blanket. J/A '56 p16

Open grade carried through intersection. J/A '56 p18

Section of US 101 south of Klamath at Freshwater Lagoon in good condition despite recent flood. J/A '56 p19

Delineation effect of O.G. plant-mixed surface at intersection. J/A '56 p21

Delineation effect of O.G. plant-mixed surface on US 101 south of Crescent City. J/A '56 p21

Delineation effects of O.G. plant-mixed surface on US 101 north of Eureka. J/A '56 p21

Use of open graded plant mixed surface blankets on mountain roads. J/A '56 p21

Plant-mix surface repair project near Buellton, Santa Barbara Co. M/A '46 p10

Preformed material, use of in weakened plane transverse joint. M/A '48 p19

**Reflection cracking**

Typical reflection cracking. M/A '56 p61

Conditions of old concrete pavement random cracks. M/A '56 p61

Expanded Metal Stud driver used in fastening sheets to P.C. C. pavement. M/A '56 p63

2-ft. wide sheet fastened along leading edge; Same, placed over random crack. M/A '56 p63

Typical expanded metal test section prior to paving. M/A '56 p63

Bituminous Road Mesh Test section with 3x8-in. diamond mesh. M/A '56 p63

Lapping of sheets; Sleds used to hold down road mesh and welded wire fabric. M/A '56 p63

Close-up of paving operations; Position of mesh after placing leveling course. M/A '56 p66

Welded wire fabric fastening leading edge of first sheet; Laying 3x6-in. wire fabric. M/A '56 p66

Road mix on gravel base surfaces in a mountainous area. Apr '42 p14



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**PAVEMENT & PAVING, Continued**

**Rubber Paving**

General view of plant.	N/D '51 p3
Experimental section after rolling; Placing surface with Barber-Greene.	N/D '51 p3
Close-up of surface with rubber added.	N/D '51 p3
Experimental section identified with marker on shoulder.	N/D '51 p3
Plant mix with and without rubber.	N/D '51 p3
Detroit PW officials and Firestone reps. observe installation of rubber road.	N/D '51 p6
Seal coats	
Heating and raking equipment used on I-80 [US 40].	M/A '52 p36
Portion of I-80 [US 40] treated by heating and raking.	M/A '52 p36
Slurry seal coat process watering the pavement.	M/J '55 p37
Slurry train in action; Spreading slurry; Completed slurry in right lane.	M/J '55 p37+
Surface treatments and, design of.	J/A '49 p11
Skid resistance study being conducted	J/A '52 p29+
Test area on I-5 in Kern Co. showing diagonal and longitudinal scoring of portland cement concrete pavement for improving skid resistance.	N/D '66 p17

**Slipform paving**

Placing portland cement concrete highway pavements with automatically controlled slip form paver.	N/D '64 p23
Tilt-drum truck paving mixers delivering concrete mixed in transit to job site.	N/D '64 p23
Close up of grade and alignment sensors on slipform paver.	J/F '65 p65
Operators steering paver manually by use of plumb-bob and stringline.	J/F '65 p65
Three-lane slipform paver in operation.	J/F '65 p66
Low profile central mix-plant.	J/F '65 p67
Tilt-drum mixers in use.	M/A '65 p68
Sliding front plate on slipform paver.	M/A '65 p68
Taut stringline being used to measure subgrade.	M/A '65 p69
Close-up of pavement edge immediately behind slide forms.	M/A '65 p69
Measuring pavement thickness.	M/A '65 p70
Pipe floating operation in progress.	M/A '65 p72
Burlap drags being used to produce nonskid texture.	M/A '65 p73
Close-up of longitudinal joint installer.	M/A '65 p73
Tie-bars for longitudinal joints being placed by mechanical installers.	M/A '65 p74
Slip-form paver in operation on I-505 [Vacaville-Dunnigan Cut-off, Rt. 90]	J/F '60 p20
Tensioned piano wire installed to guide slip-form paver.	J/F '60 p21
Right and left front elevation control probes.	J/F '60 p22
Rear view of slip-form paver.	J/F '60 p23; M/J '60 p47
Belt conveyor discharge for paving mixtures.	J/F '60 p23
Tractor-towed spreader with automatic hydraulic controls.	J/F '60 p23
Triple batch plant set up for Vacaville-Dunnigan Cut-off project.	J/F '60 p24
Rear view of mixer discharging cement-treated subgrade material.	J/F '60 p24
Front view of mixer for cement treated subgrade showing bucket conveyor.	J/F '60 p24
Close-up of slip-form paver showing right rear hydraulic ram.	J/F '60 p25
Device for installing reinforcing steel as tie bars across longitudinal weakened plane joints.	J/F '60 p26+
Paving mixer charging the slip-form paver during operations on I-505.	J/F '60 p26
Hand finishing and edging between the trailing forms.	J/F '60 p27
Applying pigmented curing compound from a self-propelling bridge.	J/F '60 p27
Paver, showing "V" float between the trailing forms.	J/F '60 p28
Slip form paver being fed by two dual-drum concrete paving mixers.	M/J '60 p47
Concrete being placed in front of slip form paver in position for initial strike-off by hydraulically operated screed.	M/J '60 p48



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**PAVEMENT & PAVING, Continued**

Screed at its forward limit of travel.	M/J '60 p48
Method used to insert keyway section in front of slip form paver.	M/J '60 p49
Rear view of slip form paver.	M/J '60 p50
Slip-form paver in use on section of I-8 [US 80] in El Cajon.	S/O '61 p66
Slip-form paver in operation on Rt. 99 [US 99-50] south of Sacramento.	N/D '61 p21
<b>Night paving operations</b>	
Finishers following slipform paver.	S/O '66 p26
Slip-form paver in operation.	S/O '66 p27
Finishing against existing pavement.	S/O '66 p28
Ten-wheel dump truck deposits load in front of moving slipform paver.	S/O '66 p28
Paving machine operator checking area just ahead of slipform.	S/O '66 p29
Slab of freshly poured concrete stretching out behind paver in distance.	S/O '66 p29
Four-lane slipform paver devised by Kasler Corp.	M/A '66 p44
Workman removing guide wiring on 4-lane paver.	M/A '66 p45
First section of concrete pavement to be laid with new 4-lane paver.	M/A '66 p45
Soil stabilization tests	Jun '38 p14
Spreading and compacting surfaces with grader and rubber-tired roller.	S/O '64 p11
Steel side forms being placed adjacent to lane of portland cement concrete.	N/D '52 p13
Subgrade construction on Santa Ana Fwy., I-5.	M/A '49 p7+
Subgrader and windrow sizer cutting subgrade and sizing windrow.	N/D '52 p13
<b>Subsealing concrete pavement</b>	
Compressor and storage tank for asphalt emulsing mounted on truck.	S/O '50 p156
Heater unit used in heating premix material for patching during cold weather.	S/O '50 p156
Tank and heating unit for pumping asphalt used in subsealing concrete pavement.	S/O '50 p156
Test tracks; oval track for testing highway construction material and surface mixtures.	S '40 p12
Test track straight-away; Super-elevated curve surfaced with bituminous mixture.	S '40 p13

**PERSONNEL/EMPLOYMENT RELATED**

Army Reserve; Division of Hwys. employees in Active Army Reserve.	M/A '56 p60
Driver training program operations.	N/D '60 p65
<b>Employees from eleven different nations at work in Substructure and Minor Contracts Section of Division of Highways in L.A.</b>	
Highway Dodgerettes women's softball team, 1951 team photo.	M/J '55 p51
Highway Hi-Lites women's basketball team, 1951 group photo.	M/J '51 p38
Maintenance men/CHP barbecue in Bear Valley.	N/D '51 P43
	N/D '50 p55
<b>Merit award recipients</b>	
Albert A. Hilton accepting certificate of merit on behalf Dist. 8 Hwy. Shop.	J/F '51 p57
Andrew B. Schoellkopf accepting Merit Award check from Gov. E. Brown.	J/A '59 p18
C.H Purcell presenting certificate of commendation to Wetherby Booman.	J/F '51 p37
Comptroller John Burrill with employee suggestion merit award winners.	N/D '66 p19
Employee demonstrating spring-loaded clip he recommended for fastening covers on outdoor fluorescent light fixtures.	M/J '64 p66+
Equipment operator H.M. McCallister receiving merit award and check.	S/O '51 p55
Personnel clerks at group meeting to discuss problems and new procedures.	M/J '61 p78
Safety; employees observing model of work area protection on multi-lane freeways.	N/D '64 p60
Training session for accounting personnel.	N/D '64 p58
Training session on equal opportunity employment.	M/A '65 p52
Training sessions on "Procedures, Testing Methods and Use of Materials for Highway Purposes."	N/D '61 p63
<b>Twenty-five Year service awards</b>	
Service award recipients and PW Dept. officials, group photo.	S/O '51 p62
Certificates and pins being distributed to Dist. 7 employees.	M/J '54 p29

## REST STOPS & VISTA POINTS

First official safety roadside rest area (I-5, Red Bluff). Fresno Co.	J/A '65 p8+; N/D '65 p43
Parking area at N. and S. Forks of Kings Rvr.	N '39 p7
Parking area at Windy Cliff River crossing on Kings River Hwy. Humboldt Co.	Jul '38 p7
Arcata; vista point on US 101.	N/D '64 p12
McKinleyville; vista point area overlooking ocean.	J/F '65 p33
Lake Co., Rt. 20; Parking area at Blue Lakes Hwy. view point.	Aug '38 p27
Marin Co.; vista point at Golden Gate Br.	M/J '63 p36; S/O '64 p23
Nevada Co.; Donner Summit, I-80 [US 50; Leg. Rt. 37]	
Roadside rests near Donner Lake	J/A '65 p10
Vista points, construction of.	S '38 p21
Lookout station for tourists.	O '37 p3
Roadside rest for desert highway.	N/D '66 p14
San Bernadino Co.; Roadside rest on I-15 near Baker.	J/A '65 p10; N/D '65 p38
Halloran Springs roadside rest areas (I-15).	S/O '65 p15+
<b>San Bernadino Mountains; Rt. 18 [Rt. 43]</b>	
Parking area at Mormon Slide Parkway	N '37 p16
Popular parkways leading into the San Bernadino Mountains.	N '37 p17
Strawberry Parkway Lookout.	N '37 p17
Valley View Point looking westerly toward Cajon Pass.	N '37 P17
San Francisco; Embarcadero Fwy. vista point	
Entrance from Broadway on-ramp.	M/A '61 p2
Fenced-off vista area on upper deck.	M/A '61 p2
Officials inspect vista area on its opening day.	M/A '61 p2
Santa Barbara; turnout and vista point on US 101 at Ortega Hill.	N/D '64 p45
Sierra Co.; roadside rest on Rt. 49 expressway near Sierra City.	N/D '64 p37
Tehama Co.; roadside rest along I-5.	N/D '65 p44
US Forest Service vista point at Peddler Hill overlooking Bear River Reservoir.	S/O '64 p9

## RIGHT-OF-WAY

American Right-of-Way Assc. (ARBA), L.A. Chapter President Dexter D. McBride, Club Chairman John C. Webb, and National Chairman Frank C. Balfour.	N/D '54 p52
Home purchased by state in 1949 with assessed value of \$530.00.	S/O '59 p39
Home owner subsequently acquired in 1950 with estimated value of \$1,800.	S/O '59 p39
Home purchased by state in 1950 assessed at \$2,170; Same home after sale at public auction and relocation in 1953 with assessed value \$4,610.	S/O '59 p42
<b>Housing adjacent to freeway right-of-way</b>	
Tract house with backyard adjoining I-880 [Eastshore Fwy.]	
Tract homes on frontage road alongside Santa Ana Fwy. (I-5)	M/A '57 p25
Home with back yard adjoining Santa Ana Fwy. enclosed with concrete block wall.	M/A '57 p26
Residences on frontage road alongside I-10 (San Bernadino Fwy.)	N/D '57 p27
Residences with back yards adjoining I-880 (Eastshore Fwy.)	M/A '57 p29
Older residential tract alongside Eastshore Fwy. with back yards adjoining right-of-way, showing plantings along rear property boundary.	M/A '57 p29
Subdivision at East Washington St. Interchange on US 101 near Petaluma.	N/D '57 p30
Subdivision layout in Hayward which provides for residences backing up to the I-880 (Eastshore Fwy) rather than facing it.	N/D '57 p31
Aerial view of subdivision in San Mateo near Bayshore Fwy. (US 101).	N/D '57 p31
Public auction of a N. Hollywood apartment house conducted by state personnel.	M/A '56 p71
Remainder parcel near Hollywood Fwy., 1954; Apartment house built on parcel, 1958.	J/F '61 p39

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**RIGHT-OF-WAY, Continued**

Right-of-way Agents' at annual meeting.	M/A '49 p49
Right-of-way agents from Oregon with Frank C. Balfour, Chief Right-of-way Agent, California Division of Highways.	M/A '49 p39
Training academy, junior right-of-way agents and assistant agents at 27th St. between Telegraph Ave. and Broadway in Oakland showing business establishments located on surplus property acquired for street right-of-way.	S/O '65 p53
Residences at end of 27th St. in 1953.	M/J '59 p10
Same location after completion of divided roadway in 1958.	M/J '59 p11

**ROAD CONSTRUCTION**

Bid opening in PW Building, Sacramento; Group tabulating and checking bids.	M/A '49 p46
Assembly room employees at work tabulating bid proposals and extensions.	J/A '57 p2
Borrow pits	M/J '55 p2+; S/O '56 p60+
Congressman Jeffrey Cohelan with map of highway construction throughout state.	S/O '60 p11
<b>Construction, nineteenth--early twentieth century</b>	
State highway in San Benito Co., typical of early highways.	J/A '52 p45
Field party, horses and equipment in Mendocino, 1913.	S/O '44 p7
Constructing original highway through Sacramento Rvr. Canyon ca. 1912.	M/J '63 p23
Paving operations in Tehama Co. ca. 1915-16, with horse drawn water-wagon used to supply concrete mixer.	J/A '50 p15
Paving operations by hand ca. 1914	J/F '61 i.c.vr.
Commissioners R.C. Irvine and F.L. Maude of first Bureau of Hwys. mapping out a state highway system in horse-drawn buckboard, 1896.	S/O '50 p71
Page from first meeting of Bureau of Hwys. held on April 11, 1895.	S/O '50 p73
Picture with title "We love our country/Be it ever so humble/There's no place like home" used in early bond issue campaign.	S/O '50 p77
Official party at ground breaking for start of construction on State Hwy. Contract No. 1 in San Mateo Co., Aug 7, 1912.	S/O '50 p78; J/A '52 p45
Hand excavation through lava rock formation on Alturas-Cedarville State Rd.	S/O '50 p93
Beginnings of hauling damage before track-laying tractors were ruled off the highways.	S/O '50 p93
Horse and buggy stranded due to poorly drained highway.	S/O '50 p93
Testing 4-inch base on state highway, 1913.	N/D '52 p46
Army survey party crossing Clear Creek Br on Klamath Rvr. Trail, 1909.	N/D '58 p52
Early test road near Pittsburg, Calif. ca. 1925.	M/A '61 p55
CHC member traveling by buckboard, 1895.	J/F '66 p2+
<b>Damage to roads</b>	
Damage to roadside caused by incessant hammering of ocean.	S/O '51 p31
Failure of Red Bluff-Susanville road due to inadequate base.	Jan '40 p10
District engineers at two-day meeting to discuss construction problems.	S/O '61 p70
<b>Divided Highways</b>	
Embossed white arrows bordered by double traffic stripe make separation strip on 4-lane highway.	N '37 p1
Divided highway on coast route preserves existing tree rows in separation strip.	N '37 p1
Divided 4-lane highway on Coast Rt. with curbed and planted minimum dividing strip, dual type pavement with 12-ft. interior and 11-ft. exterior lanes.	O '38 p7
Highway approaching Long Beach; raised white arrows in center dividing strip.	N '37 p1
Type of highway built ca 1937.	F '38 p7

## ROAD CONSTRUCTION, Continued

### Forest Highways

- 1919 construction on Klamath River. M/J '50 p10
- Average forest highway standard ca. 1930-1940. M/J '50 p10
- Lumber truck hauling load on narrow, poorly paved forest highway. M/J '50 p10
- Snow on Placerville-Lake Tahoe Forest Hwy. M/J '50 p11
- Characteristic of many early forest highway projects, outmoded by 1950. M/J '50 p12
- Calaveras Big Trees, a major factor in Ebbetts Pass Hwy. project in early years. M/J '50 p13
- Twin Lakes viewed from Mammoth Forest Hwy. M/J '50 p14
- Tunnels improve alignment on Ventura-Maricopa Forest Hwy. M/J '50 p14
- Representative forest highways designed for modern traffic. M/J '50 p14

### Recreation uses of forest highways

- Parking lot and beach scene at lodge on Sonora Hwy. M/J '50 p15
- Highway between San Bernadino and Big Bear Lake. M/J '50 p15
- Traffic on forest highway through winter sports area. M/J '50 p16

### Lumber/Logging Roads

- Lumber truck hiding out off highway. J/A '52 p9
- Heavily loaded lumber truck kicks up dust on Rt. 36 in Humboldt Co. J/A '52 p11
- Van Duzen River Br. damaged by logging trucks. J/A '52 p11
- Logging plant. M/J '66 p4
- Logging trucks on Rt. 299. J/A '52 p11
- Logging truck on narrow road, (Rt. 299). J/F '45 p6
- Lumber truck hauling load on narrow, poorly paved forest highway. M/J '50 p10

### Mobile trailer-offices

- Exterior view of trailer office used in field by Division of Hwys. engineers. N/D '49 p62
- Interior of trailer showing office equipment and facilities. N/D '49 p63
- Interior view of drafting room. M/J '56 p53
- Looking through file room into resident engineer's office. M/J '56 p53
- Left-hand exterior entrance to trailer; Resident engineer's office. M/J '56 p54
- Interior of mobile laboratory. S/O '60 p66+
- Side view with storage compartments open. S/O '60 p67

### Roads; improvements needed, general

- Sharp curves on unidentified stretch of road. Apr '39 p2
- City and county officials comprising advisory committee for local road and street needs study. N/D '64 p49
- Traffic engineers evaluating potential minor improvement spots. J/A '65 p33
- Narrow, poorly aligned section of Rt. 299. J/F '67 p29
- Typical congested street on major through route in a major Central Valley city. J/F '67 p29
- Vacation housing development, 23 miles from nearest state highway. J/F '67 p29
- Traffic congestion on major FAS route. J/F '67 p29
- Narrow section of unidentified mountain highway. J/F '67 p29
- Sustained mountain grade on section of freeway. M/J '64 p23
- Unpaved roads, Dist. 2. Jul '38 p1
- Storm damage to Jan '40 p9

### Road Construction Outside California

- Brazil; highway from Santos to San Paulo, Road between Tocopilla and Antofagasta, Chile. S/O '54 p28
- Accident blocking road between Buenaventura and Cali, Colombia. S/O '54 p28
- Egypt; Engineer Francis N. Hveem with Egyptian contractors and engineers. M/A '59 p31
- Hveem in the Laboratory in Cairo; Great Pyramid at Gizeh. M/A '59 p32
- England; Great North Rd. at Stamford. [See correction N/D '57 p52]. S/O '57 p61
- France; super-highway linking Paris, Brittany, and Normandy. M/A '46 p32

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROAD CONSTRUCTION Outside California, Continued**

**Mexico**

Gov. Soto of Sonora Mexico with California Hwy. Engineer F. N. Hveem.	J/A '51P5
Tijuana-Ensenada Hwy., grading operations on.	J/F '64 p40+
Native stone gravity retaining wall along old highway.	J/F '64 p40
Concrete pour on thin shell bent footings.	J/F '64 p41
Construction of thin shell bent footings at El Morro.	J/F '64 p41
Workmen constructing a native stone bridge pier.	J/F '64 p42
New Guinea; primitive methods of highway construction in.	J/A '57 p3

**ROADSIDE BUSINESSES AND BYPASSES**

**Alameda Co.; industries adjacent to I-880 [Eastshore Fwy.]**

Dodge Automobile Plant; Dean Van Lines; A.O. Smith Co.	M/J '54 p26
Lucky Stores Main Office; Freschi Box Co.	M/J '54 p26
Zellerbach Wax Paper Div.; Trailmobile; Republic Supply; American Blower.	M/J '54 p27
Residential development adjacent to I-880 [Nimitz Fwy.].	M/A '59 p13
Drive-in restaurant with reasonable ingress and egress along highway.	M/A '45 p2

**Fresno Co.**

Drive-in theater south of Central Ave. with access to outer highway.	N/D '49 p32
Large truck-service station constructed upon investigated property subsequent to freeway development.	N/D '49 p33
Outer highway adjacent to multiple-lane limited freeway on Rt. 99 at Malaga.	M/J '48 p7
Office and warehouse structure of the San Joaquin Poultry Producers' Assoc., constructed upon parcel investigated subsequent to development of freeway.	N/D '49 p33
Roadside business development on East Ave., Fresno.	N/D '49 p31
Imperial Co.; Imperial main business street subsequent to opening of bypass.	M/J '51 p29
Industries to the right of expressway opposite Imperial business district.	M/J '51 p31

**Kern Co.; Delano**

Block of stores built since 1954.	M/A '59 p25
High St., Delano, former state highway route.	M/A '59 p21
Main St., showing dominant pedestrian-type business establishments.	M/A '59 p26
Supermarket in West Delano built since freeway construction started in 1954.	M/A '59 p25

**Los Angeles Co.**

Crenshaw Blvd. looking north, Leimart Park, L.A.	J/F '48 p15
Development of area in vicinity of Santa Barbara Ave. and Crenshaw Blvd.	M/J '48 p2+
Development on west side of Crenshaw Blvd. from Stocker Ave. to Exposition Blvd., ca. late 1940s.	M/J '48 p3
Crenshaw Blvd. showing outer highway development.	M/J '48 p6
Development of May Co. and Broadway Dept. Store.	M/J '48 p6
El Monte business district at Valley Blvd.	J/F '59 p17
I-5; Santa Ana Fwy.	
Olympic Blvd. used for comparison in Test Area A.	J/A '54 p20
Telegraph Rd. adjacent to Santa Ana Fwy.	J/A '54 p20
New industrial plants adjacent to Santa Ana Fwy.	J/A '54 p22
Bandini Blvd.; Industry in Test Area C near Bandini Blvd. ramp.	J/A '54 p22
Homes built 1953-55 near Florence Ave. overpass and Santa Ana Fwy.	S/O '55 p2
Florence Ave. overpass bridge and surrounding homes built 1950-1955.	S/O '55 p5
Lever Bros. Manufacturing Co. plant adjacent to Santa Ana Fwy.	S/O '55 p5
Kaiser Steel plant along Santa Ana Fwy. frontage road in East L.A. area.	S/O '55 p7
Lakewood Development along Rt. 19 [Rt. 168] near Long Beach.	M/A '45 p3
Subdivision along Sepulveda Blvd. in L.A. Co.	J/F '48 p11+
Yor-Way Market on Azusa Ave. after reconstruction of highway.	S/O '61 p46
Yor-Way Market before Azusa Ave. was reconstructed.	S/O '61 p47

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROADSIDE BUSINESSES & BYPASSES, Continued**

Marin Co.; Meadow Park Housing Project near Hamilton Field (US 101).	S/O '45 p24
Monterey Co.; Eckhardt Seed Co. plant	
Plant before construction of conveyor tunnel under US 101.	M/A '54 p43
After view showing buildings removed for right-of-way clearance.	M/A '54 p43
<b>Orange Co.</b>	
Angel Stadium under construction near future Orange Fwy.	M/A '65 p32
Disneyland, showing relationship with Santa Ana Fwy.	J/A '63 p25
Attractions at Disneyland.	S/O '55 p3
Aerial view of Disneyland and surrounding environs.	S/O '55 p8
Parking lot at Disneyland on a holiday weekend.	J/F '67 p30
Broadway-Anaheim Shopping Center under construction in Anaheim.	S/O '55 p12
Robertshaw Fulton Controls Co. adjacent to Santa Ana Fwy. in Anaheim.	S/O '55 p12
<b>Placer Co.; Auburn</b>	
Aerial view of freeway through Auburn showing main business district.	M/J '50 p2
Buildings abutting form highway.	M/J '50 p3
Historic old section of Auburn near firehouse.	M/J '50 p4
Street scene during midday, showing normal parking and traffic conditions.	M/J '50 p4
Buildings constructed since building of freeway (ca. 1947).	M/J '50 p6
<b>Riverside Co.</b>	
Section of Temecula business district.	J/A '51 p7+
Community map-type sign placed along freeway to direct motorists to Temecula.	J/A '51 p8
Building (ca. 1880s-90s) in Temecula, formerly a saloon.	J/A '51 p57
<b>Sacramento Co.</b>	
N. Sacramento at junction of former state highway and freeway (Bus-80).	J/F '50 p4
Billboard on freeway at El Camino off-ramp.	J/F '50 p6
Del Paso Blvd. business section.	J/F '50 p5, 7
Frontage road facilities along the N. Sacramento Fwy.	M/A '51 p16
N. Sacramento Fwy. showing Continental Baking Plant under construction, and drive-in theater.	S/O '51 p5
Folsom; downtown business scene after opening of bypass.	M/J '51 p28
Ritz motel on frontage road in N. Sacramento.	J/F '54 p36
Large undeveloped land parcel adjacent to I-80 [US 40] near Sacramento, 1953.	M/J '60 p11
Sacramento Inn built on property after completion of freeway.	M/J '60 p11
Circuitous routes motorists traveling to and from Sacramento must follow to reach the motel.	M/J '60 p12+
Sacramento Inn as it appears to motorist passing directly opposite.	M/J '60 p14
I-80 at Grand Oaks subdivision near Antelope Rd. interchange.	J/A '66 p30
Typical study group homes showing proximity to freeway.	J/A '66 p30
<b>San Diego Co.; Escondido</b>	
Escondido, showing freeway bypass of city, surrounding orchards.	J/A '51 p12
Escondido Blvd., superseded portion, showing roadside businesses.	J/A '51 p13
Intersection of Grand Ave. business district and expressway, Escondido.	J/A '51 p14
Motel along expressway in Escondido.	J/F '54 p26
<b>San Francisco Co.</b>	
Junipero Serra Blvd., S.F. showing two outer highways.	N/D '47 p16
Residential property development on Junipero Serra Blvd.	N/D '47 p16
Scientific development of Westlake community, s. of S.F.	M/A '51 p29
<b>San Luis Obispo</b>	
Residential community of Shell Beach.	N/D '51 p39
Templeton business district along old highway route.	J/A '55 p25
<b>San Joaquin Co.; roadside businesses along expressway through Ripon.</b>	M/A '51 p30



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROADSIDE BUSINESS & BYPASSES, Continued**

**San Mateo Co.**

Roadside development on El Camino Real at Five Points, Redwood City.	M/J '47 p16
El Camino Real at San Mateo Ave., San Bruno.	M/J '47 p16
Roadside development on El Camino Real at Jenevein Ave., San Bruno.	M/J '47 p16

**Santa Barbara Co.**

New outer highway location of Anderson's Valley Inn.	S/O '49 p3, 7
Farmhouse Motel on frontage road at Buellton.	S/O '49 p5; J/F '54 p26
Service stations along outer highway block in Buellton.	S/O '49 p2
Outer highway with buildings moved back or altered to provide new boulevard.	S/O '49 p2
Casa Santa Ynez motel under construction along outer highway.	S/O '49 p5
Santa Claus, an active and prosperous looking commercial area, 1955.	M/A '56 p25
US 101 through commercial street in Buellton before construction of freeway.	S/O '49 p7
Same area after construction of freeway and outer highway.	S/O '49 p7

**Solano Co.**

Aerial view of Fairfield showing relation of freeway bypass to business district.	J/F '51 p5
Looking north on I-80 [US 40], showing new Safeway store located off freeway on Perry St. in Vallejo.	M/J '51 p7
Monte Vista Motel on expressway near Vacaville.	J/F '54 p24
North entrance to outer highway at Nut Tree.	J/A '51 p63
Typical of traffic congestion in Fairfield business district prior to freeway.	J/F '51 p4
Rt. 99 [Rt. 4] south of Modesto as it appeared when built in 1932.	S '38 p17
Same section in 1938, transformed by business development.	S '38 p17
Highway through beautiful Vaca Valley, protected from business encroachment by right-of-way agreements.	S '38 p17
Milk Farm Restaurant from northbound lanes of freeway.	J/F '49 p38
Milk Farm restaurant building as it appears approaching from outer highway.	J/F '49 p40
Fruit and vegetable drive-in west of Fairfield, on I-80 [US 40].	M/A '48 p23
Unobstructed view of Terry's Waffle Shop in Vallejo as seen from frontage road beneath Magazine St. Overpass.	S/O '56 p51

**Stanislaus Co.**

Realigned Rt. 99 [Rt. 4] near Modesto city limits when built in 1932.	S '38 p17
Same section, transformed into 20 mile zone by business development.	S '38 p17

**Tulare Co.**

K St., main Tulare business street parallel with old highway route.	M/J '56 p41
Uncontrolled vehicle movements on US highway through Tugleville.	M/A '45 p15
Unightly business development along major traffic artery in Tulare.	M/A '45 p15
West entrance to Visalia, almost entirely free of roadside development.	M/A '45 p15
Rt. 10 near Visalia along Mineral King, relatively free of roadside development.	M/A '45 p18
Orange Belt Scenic Hwy. near Lindsay, void of roadside development.	M/A '45 p18

**Ventura Co.**

Outer highway in front of Wagon Wheel Restaurant and Motel.	J/A '49 p16
Motel and vicinity in 1946 before construction of outer highway.	J/A '49 p16
Motel, showing boulevard stop for cars entering freeway from outer highway.	J/A '49 p17
Motel units which were moved back to make room for outer highway construction.	J/A '49 p17
Photo taken in 1946 showing future site of Wagon Wheel improvements.	J/A '49 p51
Motel entrance in 1947 just prior to construction of freeway and outer highway.	J/A '49 p51
Camarillo; aerial view of freeway and old highway through center of town.	S/O '55 p17
Traffic through business district on old highway before freeway.	S/O '55 p18
Business street after freeway.	S/O '55 p18
Business district along old highway route showing many commercial structures built after freeway route was adopted.	S/O '55 p23



California Highways and Public Works  
**PHOTOGRAPH INDEX 1937-1967**

**ROADSIDE BUSINESS & BYPASSES, Continued**

Vineyard adjacent to north right-of-way line, and area used for private hauling road.	S/O '48 p21
Private hauling road adjacent to right-of-way line.	S/O '48 p22
Farm machinery business on highway frontage.	J/F '49 p37
Yolo Co.; West Sacramento Fwy (I-80)	
Aerial view of W. Sacramento before completion of freeway facilities.	J/A '57 p54
Same location after, showing commercial development along superseded highway.	J/A '57 p54
Motels constructed since completion of freeway bypass.	J/A '57 p54

**ROUTES**

**Alameda Co.**

Alameda access road to San Leandro Naval Hospital in Oakland.	N/D '44 p2
Bancroft Ave. Pkwy., Oakland.	M/A '58 p38; J/A '60 p52
<b>Channelized intersections, Oakland</b>	
Broadway and Patton St. intersection before and after channelization.	F '40 p13
Channelization islands at intersection entrance to Landvale Rd.	Mar '39 p21
Channelization at San Pablo Ave. and West St.	S/O '57 p54
Channelization at West St. and Grove St.	S/O '57 p55
Divisional islands at Rt. 24/Rt. 13 [Rt. 75/Rt. 206] intersection near Broadway Tunnel.	Mar '39 p20
East 18th St. and Lakeshore Ave. along shore of Lake Merritt.	F '40 p12; Mar '40 p17
Gilman St. channelization with left turn lanes.	M/J '45 p24+
Gilman St. with flare on right lanes, raised bar division strip, and widening of center island to provide left turn lane.	M/J '45 p25
Grand Ave. and Harrison St. intersection, first marked with painted line then channelized.	F '40 p13
Crow Canyon Rd. after reconstruction.	J/F '53 p51
El Embarcadero between Grand Ave. and Lakeshore Ave., a wide, high traffic count street transformed into 2 lanes separated by a small park.	F '40 p12
Foothill Blvd.; 3 1/2 mile stretch of 4-lane divided highway.	O '39 p8
Franklin Canyon Rd.; circuitous routing with blind curves.	S '38 p1
Guests at luncheon given by Alameda Co. delegation.	S/O '56 p44
I-80 [US 40]-- <i>See also LANDSCAPE &amp; LANDSCAPE MAINTENANCE</i>	
Section near El Cerrito Overhead.	M/A '46 p11
Section looking north from University Ave. to El Cerrito Overhead.	M/A '57 p11
Section looking south to East Bay distribution structure.	M/A '57 p11
Section looking south toward downtown Oakland.	M/A '59 p13
<b>I-580 [Rt. 5; US 50; I-5W]</b>	
<b>Altamont Pass</b>	
Altamont Pass ca. 1912, before improvement.	J/A '52 p44
Altamont Pass Highway under construction.	O '37 p19
Group at Altamont Pass ground-breaking ceremonies.	Aug '37 p20
Traffic delays on old highway.	O '37 p19
View on new Altamont Pass realignment.	S '38 p4
Wide parking areas provided on realigned Altamont Pass Hwy.	S '38 p5
Altamont realignment, showing direct route straight through hills compared with circuitous course and many curves of old road.	S '38 p6
Raised division strip with six inch curb and signed opening.	S '38 p7
Gov. Merriam burning rawhide riata barrier held by Livermore cowgirls.	S '38 p8
Section of Altamont Pass.	Jul '39 p10
Altamont Pass Rd. before it was modernized with gas tax funds.	S/O '50 p132
Altamont Pass after modernization.	S/O '50 p132

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Alameda Co., Continued**

**Altamont Pass-Tracy Expressway**

Midway Rd. fill showing heavy equipment.	M/A '53 p27
Mountain House Underpass off-ramp construction using rock crusher.	M/A '53 p27
Section at Mountain House interchange looking east.	N/D '54 p38
Altamont-Tracy Expressway crossing of Delta-Mendota Canal.	M/A '55 p11

**Boehmer Hill-Castro Valley unit**

Newly constructed eastbound lanes at easterly end of project.	J/A '57 p15
New westbound lanes near Eden Canyon interchange.	J/A '57 p15
Easterly end of project showing ramps to Castro Valley Bypass.	J/A '57 p17
View of improved section from Pergola Hill looking westerly.	J/A '57 p17
Castro Valley Bypass under construction near Redwood Ave. overcrossing.	N/D '53 p22+
Construction near Strobbridge Ave. undercrossing.	N/D '53 p23
Construction in Castro Valley for Castro Valley Bypass.	M/A '54 p14
Completed Castro Valley Bypass looking east toward Dublin Canyon.	S/O '54 p5
Livermore; completed section with relocated county road on left.	N/D '50 p8
Typical traffic congestion on old road before improvement.	N/D '50 p9
Section where old road was developed as eastbound lane.	N/D '50 p9
Realignment one mile west of I-680 [Rt. 21] and Dublin.	J/A '52 p37+

**MacArthur Fwy.) [Rt. 5; US 50; I-5W]**

I-580 [Rt. 5] through Oakland, modernized with gas tax funds.	Jun '39 p14
Looking westerly across Oakland residential area showing right-of-way clearance for proposed MacArthur Fwy.	M/A '60 p9, 48
MacArthur Fwy. under construction, looking east from San Pablo Ave.	M/J '61 p5
Crossing structure will carry local traffic over MacArthur Fwy.	N/D '61 p17
MacArthur Fwy. between Park Blvd. and Buell St. in Oakland.	M/J '64 p27
MacArthur Fwy. through San Leandro near Grant Ave.	N/D '64 p65
Gov. Edmund Brown on inspection tour of construction.	N/D '65 p6
Trees and mature landscaping along MacArthur Fwy.	M/A '66 p14
Aerial view of construction near interchange with Rt. 13.	M/A '66 p14
Cleared right-of-way through Oakland for MacArthur Fwy., 1960.	M/A '66 p15
Retaining wall with aesthetic treatment on I-580.	N/D '66 p22

**I-680 freeway [Rt. 21] south of Scotts Corner.**

Section of I-680 between Rt. 238 (Fremont) and Rt. 84.	N/D '64 p7
--	------------

**I-880 (Nimitz Fwy.) [Eastshore Fwy., US 40; Rt. 17]**

Section between Richmond and Bay Bridge.	M/J '64 p47
Aerial view, looking north.	J/F '46 p35

Looking south from temporary connection to Oakland city street system at Fallon St.	M/J '49 p9
	M/J '49 p10

**Completed section opened to traffic on July 22, 1949.**

Charles H. Purcell cuts barrier as official group looks on.	J/A '49 p40
Antique vehicles take part in "Parade of Transportation."	J/A '49 p40
Crowd gathers near 23rd. Ave. overpass at dedication.	J/A '49 p41

Near Davis St., San Leandro, showing built up subdivisions on each side of freeway right-of-way.	M/A '50 p10
--	-------------

Completed section just north of 98th Ave., Oakland.	M/A '50 p11
---	-------------

Section near Hegenberger grade separation.	J/F '50 p19
--	-------------

Section near High St. separation (under construction).	J/F '50 p20
--	-------------

Section near 42nd. Ave. interchange, High St. separation in foreground.	J/F '50 p20
---	-------------

Motorcycle escort leading parade of official cars after dedication of 23rd. Ave.-98th Ave. unit in Oakland.	J/A '50 p23
	J/A '50 p23

C.H. Purcell and Thos. E. Caldecott cut ribbon at dedication.	J/A '50 p23
---	-------------

Oakland section showing 19th, 23rd., and 29th. Ave. overcrossings.	S/O '50 p111
--	--------------

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Alameda Co., Continued**

R.M. Gillis severs ribbon near Lewelling Blvd., San Lorenzo.	J/A '52 p42
Official party at ribbon cutting ceremony near 98th Ave. separation.	J/A '52 p42
Washington Ave. interchange unit (San Lorenzo).	J/A '52 p50; J/A '53 p42; M/A '54 p13
Construction at Trimble Rd. overcrossing between [Rt. 68] and Warm Springs.	J/F '53 P7
Construction at Shallenberger-Brokaw Rd.	J/F '53 P8
Winterbauer pit located 2.5 miles east of job.	J/F '53 P9
San Leandro section of freeway seen from air.	J/A '53 p43
Oakland unit in vicinity of 29th Ave.	M/A '54 p11
At connection to Bayshore Hwy. (US 101-By.)	M/A '54 p13
Trimble Rd. interchange unit and Ford plant at Milpitas.	M/A '54 p15
Section from 11th/Cypress St. to Market St. in Oakland.	M/J '55 p36; M/A '55 p9
Construction underway along Cypress St.	M/J '55 p36; M/A '57 p10
First completed unit of Eastshore Fwy. north of Distribution Structure.	M/A '55 p8
Construction between University Ave. interchange and El Cerrito Overhead.	M/A '55 p8
Construction on Rt. 238 [Rt. 228] connections between I-880 at San Lorenzo and Castro Valley; [Rt. 228] connection at Washington Ave.. interchange.	M/A '55 p10
Section from East 14th St. Interchange.; From University Ave. north.	M/A '56 p11
Oakland; Completed portion from Market to 10th.; Section at Jones Ave.	M/A '56 p12
Construction between Beard Rd. and Jackson St. in Hayward.	M/A '57 p9
Official party at ribbon-cutting dedicating Jackson St. unit.	J/F '58 p58
Looking north from the Alvarado-Niles Rd. interchange.	M/A '58 p4
Eastshore Fwy. looking north from Warm Springs.	M/A '58 p15
Fallon-Market St. unit.	M/A '59 p13
Landscaping on section in Oakland.	N/D '60 i.cvr.
Mountain Blvd. freeway, completed portion of at Park Blvd interchange.	M/A '57 p13
Niles Canyon	
Narrow roadway with blind curves over railroad tunnel.	S '38 p1
Niles Canyon, showing channel change and new highway.	N '40 p8
Detail of boulder facings set in Portland cement for slope protection.	N '40 p10
Park Blvd. improvement at intersection with Leimert Ave. (Oakland).	J/A '55 p19
Aerial view of Park Blvd from Excelsior Blvd. to Estates Dr.	J/A '55 p20
Rt. 24 near Gateway Blvd. widened to eight lanes.	M/J '65 p24
Rt. 84 [Rt. 107]	
Impediment to smooth flow of traffic near Sunol.	F '38 p12
Completed highway directly west of Sunol, looking toward Niles Canyon.	Jan '42 p11
Santa Rita Rd. [FAS 1019] in Pleasanton, reconstructed portion of.	S/O '59 p48
Warren Blvd. section between Redwood Rd. and Lincoln Ave., Oakland.	M/A '60 p27
Warren Blvd. Fwy. (Rt. 13) [Rt. 24] at Moraga Ave. Interchange.	M/J '64 p29
<b>Alpine Co.</b>	
<b>Rt. 88; Carson Pass Hwy.</b>	
Pioneer route over Kit Carson Pass.	S/O '50 p51
Carson Pass Hwy. ca. 1950.	S/O '50 p51
Realigned section of Rt. 88 at Woodfords.	S/O '64 p2
Summit of Kit Carson Pass.	S/O '64 p9
Logging trucks on improved section of Rt. 88.	S/O '64 p11
Red Lake-W. Fork Carson River unit	
Sections under construction looking westerly toward Red Lake.	S/O '57 p35
East end of project; Looking northeasterly near Blue Lake Rd.	S/O '57 p36

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Alpine Co., Continued**

Rt. 89 Ebbetts Pass Hwy.-US 395 junction (Mono Co.) FAS project	
Looking west up Slinkard Canyon before blasting; after shooting boulders.	N/D '50 p28
Bulldozer moving rock after shooting.	N/D '50 p28
Looking west before construction with dotted line indicating route.	N/D '50 p29
After construction.	N/D '50 p29
Wanda Durkee (Mrs. Frank B.) snips ceremonial ribbon.	S/O '54 p23
Scene at dedication; Alpine Co. Supervisor H.B. Burns at dedication.	S/O '54 p23
Section of new road.	S/O '54 p24
Typical damage due to heavy spring runoff.	M/J '57 p33

**Amador Co.**

**Rt. 16; Jackson Hwy. [Plymouth Rd.]**

**Jackson unit dedication**

Homer P. Brown (CHC) addressing celebrants at Jackson.	S/O '48 p3
Official group at ribbon cutting ceremony for new Jackson Hwy.	S/O '48 p3
Congested route through Jackson before new highway was built.	S/O '48 p4
Old entrance to Jackson; new alignment.	S/O '48 p4
State Hwy. Engineer George T. McCoy at Jackson celebration.	S/O '48 p5
Jackson highway near new bridge at Rt. 88/Rt. 49 junction.	S/O '48 p5

**Sloughhouse unit**

Existing narrow bridge approach to Sloughhouse.	S/O '48 p34
Grading cut on new alignment.	S/O '48 p34
Heavy equipment used in grading for Sacramento-Jackson Hwy.	S/O '48 p35
Unpaved section of Plymouth Rd. near Sloughhouse, ca. early 1900s.	M/J '64 i.cvr.
Same section with 15' portland cement concrete roadbed.	M/J '64 i.cvr.
Same section of pavement, 1964; Realigned portion of road, 1964.	M/J '64 i.cvr.
Rt. 49 (Mother Lode Hwy.) in Jackson.	S/O '45 p5

**Rt. 88; Carson Pass Hwy.**

Construction between Jackson and Pine Grove.	J/A '54 p36
Grading between Amador Co. line and two miles easterly.	J/A '54 p36
Construction underway near Jackson.	J/A '58 p21
Unpaved section between Ione and Martell.	M/J '59 p38
Martell Junction approaching Rt. 88/Rt. 49 split.	J/A '59 p47+
Rt. 88 looking toward Jackson.	J/A '59 p48; S/O '64 p10
Widened section at Carson Spur.	J/F '61 p11
Highway around Carson Spur before construction.	J/F '61 p12
Widened section at Carson Spur near Mosquito Lake.	J/F '61 p12
Sign warning motorists of road construction ahead on Rt. 88.	S/O '64 p2
Panther Meadow east of Hams Station.	S/O '64 p3
Junction of Rt. 88 and Climax Rd.	S/O '64 p4
Logging truck on curving section of Rt. 88.	S/O '64 p6
Close-up views of heavily laden logging trucks on improved section.	J/F '44 p9
Power shovel loading granite rock on dump trucks after blasting operations near Silver Lake; Portable "hot plant" near Silver Lake.	S/O '64 p7
Asphalt spreader and bottom-dump truck in operation between Peddler Hill and Tragedy Springs.	S/O '64 p8
Prize-winning section of Rt. 88 as it passes Silver Lake.	M/A '66 p28+
Scenic section of Rt. 88.	M/A '66 p32

California Highways and Public Works  
PHOTOGRAPH INDEX 1937-1967

## ROUTES, Continued

### Butte Co.

#### Chico Esplanade

Early day photo of Chico Esplanade.	M/J '49 p11
View of Esplanade at Memorial Way.	M/J '49 p12
Outer highway of Esplanade between 2nd. and 3rd. Ave.	M/J '49 p12
Traffic movement at the junction of 4th Ave. with the Esplanade.	M/J '49 p13
Parking along the outer highway. [US 99E]	M/J '49p13
Chico Esplanade near Memorial Way after widening.	J/F '60 p53
Chico, Main St.; one-way couplet which takes Rt. 99 traffic through the city.	J/A '59 p26

#### Chico-Paradise Skyway [FAS Rt. 757] dedication

Deputy Director of PW Frank Durkee, Butte Co. Supervisors	
Frank L. Patty and John N. Bille at ribbon cutting ceremony.	N/D '50 p14
Completed section of Chico-Paradise Skyway.	N/D '50 p15
View of Skyway showing sheer walls of lava cap.	N/D '50 p15
Easterly view showing right-of-way constructed between railroad embankment and edge of bluff.	N/D '50 p16
Typical construction difficulties encountered during project.	N/D '50 p16
Oroville Bypass at junction with Rt. 70 and Oroville-Richvale highway.	J/F '56 p50+
Rt. 32; improved section between Chico and Hog Springs.	J/A '58 p7
Improved section of improved Rt. 32 east of Chico.	J/A '58 p8
Official party at ribbon-cutting opening improved section of Rt. 32.	M/A '58 p45

#### Rt. 70; Feather River Hwy. [US 40-Alt.; Leg. Rt. 24]

Crowd of celebrants gathered at portal of Grizzly Dome to participate in dedication of Feather River highway.	Aug '37 p7
Gov. Merriam, Director of PW Earl Lee Kelly, and Chief Winnemucca.	Aug '37 p7
Feather River Hwy. soon after completion.	May '38 p15
Arch Rock.	M/J '50 p45
Aerial photograph showing proposed relocation of Feather River Hwy.	J/A '53 p32
Near future intersection of relocated Rt. 70 and Pentz-Cherokee Rd.	S/O '57 p27
Cleared area for new roadway east of the W. Branch of Feather Rvr.	S/O '57 p28
Cut and fill operation in vicinity of Yankee Hill Rd.	S/O '57 p28+
Project manager, District Construction Engineer, and Resident Engineer viewing plans of project.	S/O '57 p28
New alignment near Flag Canyon Br. site.	S/O '57 p29
New alignment at intersection with Clark Rd.	S/O '57 p29
Wicks Corner-Jarbo Gap relocation.	J/A '58 p7
Large benched cut south of W. Branch Br.	J/A '59 p29
Heavy grading work on Rt. 70 [US 40-Alt.] relocation.	J/A '59 p30
Relocated freeway (Rt. 70) leading toward Jarbo Gap.	M/J '64 p57, 60
Relocated Rt. 70 [US 40-Alt.] near junction with Oroville Dam Blvd.	M/J '64 p57
Oroville-Wicks Corner section approaching Grand Ave. interchange.	M/J '64 p58
Relocated section near Rt. 191 turn-off.	M/J '64 p58
Narrow N. Fork Feather Rvr. Canyon, before being inundated by reservoir.	M/J '64 p59
Section of old Feather River Hwy., closed to traffic.	M/J '64 p59
Section near Garden Ave. interchange.	M/J '64 p62
Wicks Corner intersection; New alignment at Wicks Corner.	M/J '64 p62
Four-lane section northeast of W. Branch Br.	M/J '64 p62
Rt. 99 [US 99E] near Durham after resurfacing.	J/F '45 p28
Oroville Wye and Chico section after relocation.	J/F '55 p39
Ribbon cutting ceremony with official party at dedication.	J/F '55 p40
Section through Chico near Bidwell Park.	N/D '66 p22

## ROUTES, Continued

### Calaveras Co.

#### Rt. 26 [Rt. 5] access road

Equipment grading line change on new route over Mokelumne Hill. M/J '44 p10  
 Lumber trucks hauling heavy loads over steep grades and sharp turns  
 on old road east of Mokelumne Hill. M/J '44 p11  
 Big load of logs tops summit of McFadden Hill on new, wide highway. M/J '44 p11  
 View east of Flume House Hill. M/J '44 p11

#### Rt. 49 (Mother Lode Hwy.); obsolete road approaching Carson Hill.

Mar '39 p11

Colusa Co.; I-5 [US 99W] section through Arbuckle near Hall St. overcrossing.

J/A '58 p6

### Contra Costa Co.

#### BART construction

Full-scale model of BART car; Laboratory car on test track. J/A '66 p36  
 Section of BART test track near Concord. J/A '66 p36  
 Attendant's seat for monitoring automatic control. J/A '66 p36  
 BART aerial transit line built near Walnut Creek as test track. J/A '66 p37  
 Byron Hwy. [county road] after improvements. N/D '53 p15  
 Crow Canyon Rd., summit cut on improved section of road. N/D '49 p22+  
 Cummings Skyway near interchange connecting it to I-80 [US 40]. S/O '61 p60  
 FAS highway and intersection near Martinez. N/D '54 p29

#### I-80 [US 40]

#### Carquinez Br. approaches

Excavation material from the "big cut" being placed in a fill. J/F '57 p38  
 Tandem hookup consisting of one tractor and one operator hauling  
 two scrapers ascending top of "big cut." J/F '57 p42  
 Tandem scrapers being loaded. J/F '57 p42  
 "Big cut" on section approaching Carquinez Br. M/A '57 p16  
 Work on "big cut" to the south of main bridge approach. J/A '57 p36  
 Roadwork on Vallejo side nearing completion. J/A '57 p36  
 Under construction near Crockett. M/A '58 p9  
 "Big cut" completed. J/F '59 p5  
 Approaches to Carquinez Br. through manmade "Big Cut" canyon. J/F '59 p58  
 Completed I-80 [US 40] through Richmond looking north. M/A '57 p16  
 Approaches at southern end of twin spans J/F '59 p8  
 Section looking south through "big cut" from Carquinez bridges. M/A '59 p1  
 Looking southward over Crockett Interchange from Carquinez Br. M/A '60 p18  
 Highway detour and bridge operations on Pinole. F '39 p21  
 Richmond section of freeway. J/F '64 p16  
 Rodeo; I-80 [US 40] prior to elimination of left turns. N/D '52 p24  
 San Pablo Dam Rd. at intersection with San Pablo Ave. showing clearance  
 underway for future freeway, 1954. J/F '64 p16  
 Section at Carlson Blvd. off-ramp during final phase of construction. J/A '60 p57  
 Section in Richmond near Carlson Ave. interchange. J/A '60 p61  
 Completed six-lane section in Richmond. N/D '60 p42; M/J '61 p33  
 Section of I-80 [US 40], former route of Don Pedro Fages ca. 1772. S/O '50 p13  
 Section near Oleum opened in Feb 1958. M/A '58 p7  
 Section near San Pablo Dam Rd. looking toward Richmond. M/A '58 p7  
 Traffic detoured around construction on El Cerrito Overhead. J/A '60 p58

California Highways and Public Works  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES, Continued**

**I-680 [Rt. 107]**

Monument Blvd. near Walnut Creek Br., after widening.	M/J '65 p30
Section at S. Main St. Interchange in Walnut Creek.	M/A '60 p28; M/J '60 p28
Section near Danville showing proposed route of realignment.	M/J '61 p16
Section in Pleasant Hill between Monument Blvd. and Willow Pass Rd.	M/J '64 p31
Section between Walnut Creek and Danville.	M/J '65 p31
Taylor Blvd. at intersection with I-680 [Rt. 21].	S/O '61 p62
Mountain Blvd expressway under construction near La Salle Ave.	M/A '56 p10
Completed portion near Moraga-Thornhill intersection.	M/A '56 p10
Pleasant Hill Rd.	N/D '54 p28

**Richmond access road projects**

I-80 [US 40]/Gilman St. intersection, showing island under construction.	N/D '44 p3
14th St., Richmond looking north from rear entrance to Shipyard No. 1.	N/D '44 p4
Richmond access road, looking north from El Cerrito Overhead.	N/D '44 p4

**Rt. 4; [Arnold] Industrial Hwy. [Rt. 75]**

Scenic view across Diablo Valley.	O '39 p20
Section between Willow Pass and Franklin Canyon.	O '39 p21
View looking westerly through deep cut near east end of Willow Pass.	O '39 p21
Pioneering cut on Willow Pass [Industrial] Hwy.	J/F '47 p19
Franklin Canyon, equipment working on new grade of relocated section.	N/D '43 p8
Excavating cut for new alignment; Dragline placing drainage pipe.	N/D '43 p9
<b>Pt. Chicago Rd-Railroad Ave. unit, traffic congestion on.</b>	M/A '51 p18
Curving approaches to narrow subway on existing highway.	M/A '51 p19
Aerial view of underpass with new highway in immediate foreground.	M/A '51 p19
Completion of surfacing in section of project.	M/A '51 p19
Connection to Port Chicago Rd. under construction.	M/A '51 p19
Dedication at Port Chicago end of freeway.	J/A '51 p19
Caravan going over new highway.	J/A '51 p19
New section of highway looking west.	J/A '51 p19
Joe Arnold cuts ribbon opening new section of Arnold Fwy.	J/A '51 p20

**Pittsburg-Antioch unit**

Paving operations in progress near SP spur track overcrossing.	N/D '52 p5,7
Aerial view of construction showing railroad spur overcrossing.	N/D '52 p6
View west from Camp Stoneman underpass.	N/D '52 p7
Intersection of California Ave. with existing Rt. 4 east of Pittsburg.	N/D '52 p7
Contractor's concrete batching plant.	N/D '52 p8
Easterly terminus of construction entering Antioch near A St.	N/D '52 p5,7
Rt. 17 [Rt. 69] under construction through Richmond near San Pablo Ave.	M/A '56 p13

**Rt. 24 [Oakland-Walnut Creek arterial]**

**Caldecott Tunnel approaches**

Grading in progress for additional lanes approaching tunnel.	M/J '61 p17
Construction on 8-lane freeway near east portal Caldecott Tunnel.	M/J '64 p32
Freeway widening underway approaching Caldecott Tunnel.	N/D '64 p13
Construction on Rt. 24 freeway section paralleling Mt. Diablo Blvd.	J/F '64 p16
Lafayette Bypass under construction near Pleasant Hill Rd. interchange.	M/A '57 p15
Dedication, official party at ribbon-cutting ceremony.	J/A '57 p21
Helicopter instead of traditional shears used to cut barrier tapes.	J/A '57 p22



California Highways and Public Works  
PHOTOGRAPH INDEX 1937-1967

**ROUTES Contra Costa Co., Continued**

**Orinda Junction section--See also EROSION CONTROL**

Orinda slide section of Rt. 24, rebuilt as 4-lane divided highway.	N/D '43 p18
Section over Charles Hill.	N/D '43 p19
Orinda, showing improvements made at Rt. 24 crossroads.	M/A '54 p17
Orinda Crossroads [formerly Bryant] in 1910.	N/D '54 p46
Orinda in 1953, prior to construction.	N/D '54 p48
Morning traffic back-up one mile east of Orinda signal.	N/D '54 p48
Afternoon traffic back-up near east portal of Broadway Tunnel.	N/D '54 p48
Rt. 24 at Orinda, where BART trains will run in median.	J/A '66 p37
Section north of Walnut Cr. near Geary Rd.	M/A '57 p14
Section near Oak Park Blvd. interchange.	M/A '57 p14
Section at Acalanes Valley Rd. interchange looking east toward Mt. Diablo.	M/A '60 p21
Section at Oak Park Blvd. Interchange, looking northerly.	M/A '60 p24
Walnut Creek Bypass under construction.	M/A '59 p52
Walnut Creek Bypass between Orinda and Lafayette.	M/J '60 p27
"Y" interchange in Walnut Creek.	M/J '60 p28
Wilbur Ave., an industrial highway east of Antioch.	J/A '59 p43
Ygnacio Valley Rd. Extension limited access expressway.	M/J '56 p69

**Del Norte Co.**

**US 101**

Blasting scene in forest to remove legion of stumps.	S/O '54 p40
Clearing through area of dense second-growth redwood forest.	S/O '54 p41
Digging out road by hand after slide, 1925.	J/A '64 p32
Expressway under construction near Wilson Creek Br.	M/A '57 p68
Grading line change on north bank of Smith River.	J/F '45 p5
Grading progress on portion relatively clear of brush or trees.	S/O '54 p63
Improved section of US 101 through Crescent City.	N/D '59 p35
Ocean front section of US 101 near Wilson Creek.	S/O '64 p18
Plank road near Crescent City ca. 1915.	M/J '64 p10
Section south of Crescent City, 1915.	J/A '64 p24
Poorly aligned section.	S/O '54 p40
Section which required sidehill viaduct construction to widen, 1931.	J/A '64 p30
US 199; Hazel Summit area, late 1920s.	S/O '60 p3
Broken Kettle Cr., future location of reconstructed US 199.	S/O '60 p4
Completed rough grade of north Collier [Hazelview] Tunnel approach.	M/J '61 p29
Old roadway, showing clearing work under way for new alignment.	M/J '61 p30
Realigned approach to Collier Tunnel.	S/O '64 p23

**El Dorado Co.**

Rt. 193 [Rt. 93] near Georgetown. J/A '58 p1

**US 50**

Aukum Rd. realignment project, aerial view of construction area for.	M/A '61 p28
Bijou section after widening.	S/O '57 p45
Camino Bypass on US 50.	J/A '58 p1

**Echo Summit-Meyers Grade section--See also SNOW**

Partially completed relocation on east side of Echo Summit.	Aug '38 p4
Power shovel makes final cut for Meyers grade relocation.	Aug '38 p5
Construction looking south toward Luther Pass, showing portions of old Hawley Grade.	Aug '38 p4
View of Echo Summit relocation looking toward Lake Tahoe.	Aug '40 p19
Meyers Grade between Echo Summit and Lake Tahoe.	N/D '47 p18
C. H. Purcell with Gov. Vail Pittman (Nevada) at dedication of Meyer's grade project.	N/D '47 p30

**ROUTES El Dorado Co., Continued**

Constructing realignment from the foot of Meyers Grade to Mays.	J/A '50 p45
Existing highway on left, realignment on right.	J/A '50 p45
Rebuilding US 50 over Myers Grade, 1940.	J/A '60 p55
Old Johnson Cut-off emigrant trail-Meyers Grade before modernization.	S/O '50 p54
Echo Summit ca. 1950, replaces Johnson Cut-off and old Meyers Grade.	S/O '50 p55
US 50 west of Echo Summit.	Jan '42 p23
Five Mile Terrace-Camino expressway dedication, stagecoach used in ribbon-cutting ceremony.	N/D '57 p21
<b>Folsom-Clarksville realignment under construction.</b>	Apr '40 p21
Shovel engaged in heavy excavation work east of Folsom.	Apr '40 p20
Realignment east of Folsom.	N '40 p23
Cut through solid rock where blasting was necessary.	N '40 p23
Clarksville grade on realigned section.	N '40 p22
Realignment east of Clarksville.	N '40 p24
<b>Fresh Pond-Pollock Pines Forest Hwy.</b>	
Forest highway between Fresh Pond and Pollock Pines taking shape.	M/J '46 p2
Completed section, constructed by U.S. BPR.	N/D '47 p14
Fresh Pond section.	N/D '47 p15
<b>Lake Tahoe Wagon Rd. (historic)</b>	
Rubble retaining wall built by state on Lake Tahoe Wagon Rd.	S/O '50 p86
Granite mile post erected by state on Lake Tahoe Wagon Rd.	S/O '50 p86
Lake Tahoe Wagon Rd. showing remains of old corduroy road.	S/O '50 p87
Lake Tahoe Wagon Rd. crossing S. Fork American River at Riverton.	S/O '50 p91
Latrobe Rd intersection after removal of cut bank.	J/A '59 p28
<b>Placerville Fwy.</b>	
Under construction	N/D '51 p22
East end of project; Section of improved highway before striping.	N/D '51 p23
Aerial view of existing route, proposed route through Placerville.	N/D '52 p59
Construction operations looking easterly.	S/O '54 p5
Realigned US 50 between Clarksville and Shingle Springs.	N/D '55 p10
Traffic congestion through Placerville before expressway.	N/D '55 p11
Aerial view of beginning of project.	N/D '55 p12
End of project near Washington St. showing Placerville Fruit Growers pear packing plant.	N/D '55 p12
Camino, Placerville, and Lake Tahoe RR truss that was salvaged and used to span a grade separation during construction.	N/D '55 p13
West of Placerville, showing initial two lanes of future 4-lane freeway.	N/D '58 p7
Placerville-Lake Tahoe Forest Hwy.	M/J '50 p18
Pollock Pines freeway section.	N/D '65 p15
Pollock Pines Bypass on US 50; Road entering Pollock Pines.	J/F '66 p32+
<b>Shingle Springs-El Dorado unit</b>	
Grading operations near Shingle Springs.	M/J '46 p11
Looking from Windmill Hill toward Shingle Springs showing clearing and old pioneer grading, existing highway in middle ground.	M/J '46 p4
Hazardous curve to be eliminated by US 50 realignment.	M/J '46 p11
Realigned section.	N/D '47 p13
South shore Lake Tahoe section under construction, looking east.	N/D '57 p13
US 50 in the High Sierra near the base of Lovers Leap, 1912.	J/A '61 p61
Webber Creek Br.-Clark's Corner unit, old alignment	D '37 p19
Realignment across site of new Webber Creek Br.	D '37 p19
Sharp curve between Clark's Corner and El Dorado to be eliminated.	D '37 p19

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES, Continued**

**Fresno Co.**

Blackstone Ave. (Rt. 99 [Rt. 4] through Fresno, after widening. I-5 [Westside Fwy.]	N/D '58 p5
Adopted routing near junction of Fresno-Coalinga Rd. and Rt. 33. Construction under way at site of future Panoche Rd. interchange. I-5, where "vines and crops, pasture and rangelands sweep the horizon."	S/O '60 p55 M/A '66 p37 M/J '66 p25
Rt. 33 [Rt. 138], heavy truck load of oil field equipment on. Rt. 41	N '38 p1
Steep, narrow mountain grade east of Dunlap. Section near Mendota, subjected to flooding every winter. Sections of realignment between Fresno and Yosemite Valley.	N '38 p1 N '38 p3 N '41 p17
Rt. 43 [Rt. 135], an oiled earth surface road. Truck and trailer loads of baled cotton on [Rt. 135]	N '38 p2
<b>Rt. 99 [Leg. Rt. 4]</b> Improved section at north boundary of city of Fresno. Divided highway between Fresno and Herndon. Relocation in Fresno looking northerly toward Cedar Ave. intersection. Palm tree in center divider at Orange Ave. intersection (Fresno). Channelization at Cedar Ave. intersection (Fresno). Channelization islands on Selma link of Rt. 99. Selma Link, general views of.	Aug '37 p19 Aug '37 p19; F '38 p24 N/D '46 p33 N/D '46 p33 N/D '46 p33 F '39 p18 F '39 p19
Rt. 99 at Fresno, showing California and Monterey Ave. overhangs. Divided section between Selma and Fowler. Trees that bordered old highway roadside used as division strip. Fresno Bypass under construction. Fresno Fwy. construction, indicating locations of planned structures. Fresno, showing clearing for future Rt. 99 construction. Official party at grape-rope-cutting ceremony dedicating bypass. Parade of first cars to use bypass. Aerial view of Fresno Bypass and environs.	S/O '50 p109 N '43 p23 N '43 p23 S/O '55 p27 S/O '55 p28 S/O '54 p2 N/D '57 p23 N/D '57 p23 N/D '57 p24
Construction north of Fresno near Dakota Ave and Ashland Ave. Widened section near Tower overcrossing and Ashland Ave. interchange. Section at north end of project near Herndon Ave. overcrossing. Freeway section at Highway City near Shaw Ave. interchange. Fresno freeway, eliminating last 3-lane section of US 99. Fresno end of relocation project near connection to Golden State Blvd. Ramps with temporary connections to California Ave. indicate diagonal alignment of future Rt. 41 into downtown Fresno.	S/O '59 p8 J/A '60 p7 J/A '60 p8 J/A '60 p8 N/D '60 p14 J/F '65 p18 J/F '65 p18
Rt. 145; Fresno-Colinga road southwest of Five Points. Rt. 168 [Rt. 76] Crossing Rancheria Cr. at Huntington Lake. Improved section near Huntington Lake. Lumber trucks on narrow grade of [Rt. 76].	S/O '47 p25 S/O '58 p40 S/O '59 p7 N '38 p1
<b>Rt. 180 (Kings River Canyon Hwy.)</b> View down Kings River toward mouth of Boulder Creek. Windy Cliff crossing of Kings River under construction. Cliff face typical of many that had to be blasted. Parking area at Windy Cliff River crossing on Kings River Hwy. Section between Grizzly and Boulder Creek. View on floor of valley east of Cedar Grove. Along the river near Deer Cove Cr. Bend in highway east of Boulder Creek.	Jul '38 p5 Jul '38 p6 Jul '38 p6 Jul '38 p7 N '39 p6 N '39 p8 N '39 p8 N '39 p9

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Fresno Co., Continued**

Highway skirts base of massive cliffs.	N '39 p9
Official group at Kings River Canyon dedication.	N '39 p23
Constructing rock retaining wall on PWA link of Grant Park approach road.	Jun '40 p19
Drilling for removal of cliff.	Jun '40 p19
Windy Cliff on Kings River Canyon Hwy.	S/O '45 p6
Construction on access road to Gen. Grant National Park, early 1940s.	J/A '60 p55
Panorama from highway showing new alignment of Squaw Valley route to Kings Canyon Park.	N '41 p8
New unit on realignment between Squaw Valley and Dunlap.	N '41 p9
Modern type mountain road in Squaw Valley area.	N '41 p10
Shovel and trucks at work on Kings River Canyon unit.	N '41 p25
Kings River Canyon Hwy.	M/J '50 p45
Relocated section of Rt. 180 at crossing of Friant-Kern Canal.	S/O '59 p8

**Rt. 198, Warthan Canyon**

Realigned road avoids dangerous stream crossing.	Aug '42 p2
Typical road washout in Warthan Canyon.	Aug '42 p3
Official party at Warthan Canyon dedication.	J/A '51 p22
Wartham Canyon highway after improvement.	J/A '51 p23
Official dedication party traveling on newly completed section.	J/A '51 p23
Channel change and new road at Lone Pine Inn.	J/A '51 p24
90-ft. hill cut approached by 2,500-ft. radius curve.	J/A '51 p24
New 7,600-ft. tangent replaces winding road on right.	J/A '51 p24
Sharp curve on old road near easterly end of project.	J/A '51 p24
Group photo of "old timers" who worked on Warthan Canyon project.	J/A '51 p25
Shields Ave. in Fresno.	S/O '65 p19

**Humboldt Co.**

Approach to Albion River Br.	J/F '45 p29
Logging truck maneuvering winding section of county road.	M/A '52 p18
Road obtained by county through reconstruction; Same, after improvement.	J/F '45 p6

**Rt. 299 [US 299]**

Logging trucks waiting to use road during widening operations.	M/J '47 p26
Logging truck negotiating curves and steep grade on US 299.	M/J '47 p28
Partially completed widening between Blue Lake and Redwood Summit.	M/J '47 p29
Mad River-Blue Lake Fwy. section near Glendale overhead.	J/A '66 p28
Asst. State PW Director T. Fred Bagshaw at freeway dedication.	J/A '66 p29
Industries on Parade lumber truck breaks ribbon at official opening.	J/A '66 p29
Harold Hunt, president, Hwy. 299 Assoc. receives hard hat award for his highway improvement promotion work.	J/A '66 p29

**US 101 (Redwood Hwy.)**

Avenue of Giants Pkwy., off-ramp leading to.	S/O '60 p70
US 101 through Avenue of the Giants.	S/O '64 p15
Blair-Lansdale State Park on Redwood Hwy.	M/J '56 p28

**Freshwater Lagoon as seen from Lookout Point.**

Restricting alignment and heavy hauling on highway.	M/A '49 p17
Logs and debris carried onto Freshwater Sandspit by ocean tide, showing where new highway is to be constructed.	M/A '49 p18
Large piece of driftwood on sandspit.	M/A '49 p18
Route of proposed highway across Freshwater Sandspit.	M/A '49 p19
Construction in progress north of Stone Lagoon Summit.	N/D '49 p13
Grading operations at Stone Lagoon Summit, south end of project.	N/D '49 p13
Completed 220-ft. high cut at Lookout Point.	N/D '49 p14
Highway along sand pit with Freshwater Lagoon on right, ocean on left.	N/D '49 p14

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Humboldt Co., Continued**

Freshwater Lagoon south of Orick, US 101 rerouted along sandspit.	J/A '58 p39
4-lane fill, and timber trestle it will replace near Big Lagoon.	J/A '58 p41
Patrick's Pt.-Big Lagoon freeway under construction.	N/D '59 p36
Freshwater Lagoon section south of Orick.	S/O '64 p22
Fortuna-Fernbridge freeway under construction.	N/D '59 p38
Garberville section of US 101. Jan '39 p5; M/J '56 p25+; S/O '64 p17;	M/A '66 p18
Redwood Hwy. through Garberville, 1914.	J/A '64 p27
G St. between 3rd and 4th Streets in Eureka, 1864.	M/J '64 p3
High water on Salt Rvr. near Ferndale, 1909.	M/J '64 p9
Holbrook Grove section.	M/J '56 p26
Little River-Trinidad unit	
Improvement at beginning of project near Little River.	J/A '60 p23
Construction underway near Little River Beach.	J/A '60 p24
Drain outlets at former slide area.	J/A '60 p23
<b>Loleta Bypass</b>	
New highway under construction viewed from Hookton Rd.	M/A '57 p52
Stabilization trench right angles to centerline.	M/A '57 p53
On top of Table Bluff Hill in thorough cut.	M/A '57 p53
Stripping wet material and constructing stabilization trench.	M/A '57 p55
Construction at north end of project looking northerly.	M/A '57 p55
Completed Loleta Bypass.	M/A '58 p17+
McKinleyville Fwy section.	J/F '65 p31
Aerial view of McKinleyville Fwy. near Clam Beach Interchange.	J/F '65 p32
Vista Point parking area.	J/F '65 p33
Section at Crannell Interchange.	J/F '65 p34
<b>Michael J. Burns Fwy. [Arcata Bypass]</b>	
Traffic through Arcata before bypass.	S/O '53 p2
Construction near 11th St. (Arcata)	S/O '53 p3
Construction at north and south ends of project.	S/O '53 p4
Bulldozer removing unstable material under bridge on bypass.	S/O '53 p5
Logger cuts through redwood trunk to officially open freeway.	S/O '54 p56
Speaker's platform at dedication.	S/O '54 p57
Mrs. Michael J. Burns with family members and members of county Chamber of Commerce at rededication of Michael J. Burns Fwy.	N/D '54 p37
Gov. Knight, Sen. Randolph Collier, and Mrs. Michael J. Burns with sign for Burns Memorial Fwy.	
Ribbon-cutting ceremony for signing freeway.	S/O '55 p25
Arcata Bypass on US 101 near 9th and 14th St. Overcrossings.	S/O '55 p25
Reconstruction north of Arcata at US 101-Rt. 299 interchange.	J/A '58 p45
Redwood stumps which were removed to widen highway.	J/A '58 p43
Richardson's Grove State Park section. Jan '39 p5; M/J '56 p26+	Jun '37 p21
Measuring distance between trees in Richardson Grove vicinity, 1930.	M/J '56 p26+
<b>Scotia Bypass</b> slide area.	J/A '64 p31
South end of project at connection to old highway.	S/O '53 p7
Completed section of freeway.	S/O '53 p7
Reinforced concrete crib near Scotia.	S/O '53 p9
Section of Scotia Bypass.	J/A '58 p38
Section south of Eureka near Southern Humboldt Bay.	S/O '64 p18
Sharp, reversing curves south of Orick.	Jan '39 p4
Survey crew fording Eel River while laying out original Redwood Hwy. route through S. Fork Canyon.	
Survey crew moving camp while developing S Fork route.	J/A '64 p26
	J/A '64 p26

**ROUTES Humboldt Co., Continued**

Sylvandale-Dean Creek freeway section.	N/D '65 p17
Trinidad-McNeill's Ranch link looking north across Mill Creek showing rolling grade of existing road.	Jun '37 p21
<b>US 101; Redwood Parks Fwy. [Redwood Bypass]</b>	
Terrain to be traversed by freeway near S. Fork Eel Rvr., Phillipsville.	M/J '56 p25
Portions of Redwood Hwy. to be superseded by freeway.	M/J '56 p25+
<b>"Big Cut" construction</b>	
Earthmover being towed up the face of the highest cut in California road building history.	S/O '57 p52
Bulldozers pioneering up-ramp on north end of big cut.	S/O '57 p52
Detour bypassing big cut.	S/O '57 p52
400-hp "donkey" engines hoisting earthmovers up steep up-ramp.	S/O '57 p53
Earthmovers descending up-ramp.	S/O '57 p53
Construction work near "Big Cut."	M/J '58 p41
Equipment at work on "Big Cut."	M/J '58 p42
Section between Phillipsville and Arden.	J/A '58 p35
Expressway on US 101 between Robinson Ferry Br. and Alton.	J/A '58 p44
Heavy grading operations for first unit of Redwood Bypass.	J/A '58 p37
Completed first unit north of Dyerville at High Rock Rd. undercrossing.	N/D '59 p31
Cleared area prior to grading second unit between Myers and Dyerville.	N/D '59 p32
Completed first unit of Redwood Parks freeway near Englewood.	N/D '59 p34
Freeway section near Myers Flat.	N/D '61 p10; S/O '64 p15
Completed freeway section in northern Humboldt Co.	N/D '61 p46
Section south of Miranda.	N/D '64 p5
Scenic section of Redwood Fwy. along S Fork Eel River.	M/A '66 p17
View across Mill Cr. showing new road alignment.	Mar '38 p18

**Imperial Co.**

Borrego Valley, now part of Anza State Park traversed by Anza expedition.	S/O '50 p18
Dogwood Rd. parallel to Dogwood Canal in El Centro.	S/O '60 p64
Dogwood Rd. in Brawley near Plaza Park, after improvement.	S/O '60 p65
Imperial Valley road lower than fields and roadside irrigation canals.	F '39 p3
<b>I-8 [US 80], Mountain Springs Grade relocation.</b>	
Official group at groundbreaking ceremony.	N '38 p21
Dynamite blast set off by Gov. Merriam.	N '38 p21
Winding section across mountains between Imperial and San Diego Co.	N '38 p21
Equipment working on excavation of new Mountain Springs Grade.	Apr '39 p16
Construction scene on Mt. Springs Grade.	Apr '39 p17
<b>I-8 [US 80], Sand Hills</b>	
Giant sand dunes in which blocked the way of Anza and his men in 1774.	S/O '50 p16
Corduoy road across Yuma sand dunes west of Open Valley ca. 1915-16.	N/D '45 p10
Modern highway which replaced the old plank road.	N/D '45 p11
Section of improved plank road, 1916.	J/A '61 p13
Vehicle on plank road across sand dunes ca. 1916.	S/O '50 p17
Remaining section of improved plank road built in 1916.	J/A '61 p11
Dragline building an embankment on I-8 through Sand Hills, 1925.	J/A '61 p12
Elevated highway through sand dunes, 1926.	S/O '50 p17
Paving I-8 [US 80] in 1925.	J/A '61 p12+
Vibratory compactor and dozer in operation during I-8 [US 80] reconstruction through Sand Hills.	J/A '61 p14
Div. of Highways jeep on sand dune.	J/A '61 p14
Base-spreading operations during I-8 [US 80] reconstruction.	J/A '61 p15
Haul road for construction equipment crossing old highway.	J/A '61 p15

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Imperial Co., Continued**

Aerial view showing location of borrow pit site in relation to construction.	J/A '61 p16
Grading operations on I-8 [US 80] reconstruction.	J/A '61 p16
All American Canal maintenance station and yard on old section of highway.	J/A '61 p17
Construction on I-8 [US 80] near bridge across All American Canal.	J/A '61 p11
Section through Sand Hills near All American Canal.	J/A '61 p11; N/D '61 p16
I-8 [US 80]/Rt. 98 intersection in southwestern Imperial Co.	N/D '58 p35
Secondary highways, before and after improvement.	May '38 p22+
Signs warning of traffic limitations on Niland-Mecca Road.	F '38 p15
<b>Inyo Co.</b>	
Box Canyon on Westgard Pass.	Jan '39 p6
Glacier Lodge Road before and after improvements.	J/A '53 p57
<b>Panamint Rd.</b>	
Looking north into Panamint Valley showing old Nadeau Rd.	J/F '51 p19
New road climbing out of Panamint Valley toward Wildrose.	J/F '51 p19
New road at summit of Slate Range.	J/F '51 p21
New road winding down slate range into Panamint Valley.	J/F '51 p21
New road through Panamint Valley.	J/F '51 p21
Plank road across sand dunes near Yuma, 1923.	J/A '50 p16
<b>Rt. 127 [Towne's Pass Hwy.], Death Valley National Monument section</b>	
Rt. 127 before state took over maintenance and improvement.	J/F '45 p31
New highway through Stovepipe Wells; Road through Panamint Valley.	J/F '45 p31
<b>Rt. 190; Lone Pine-Death Valley Hwy.</b>	
Construction on new highway leading into Death Valley.	Jul '37 p7
Drillers at work on difficult stretch near Panamint Sink.	Jul '37 p7
Heavy equipment at work on grade which will do away with steep, narrow roadbed over Zinc Hill and Lane Hill.	Jul '37 p7
Section of completed desert highway.	Jul '37 p7
Official party at dedication.	N '37 p6
View of new highway leading down into Panamint Sink.	N '37 p6
Gov. Merriam, rifle in hand, rides as express messenger with driver Ollie Dearborn on Mt. Whitney-Death Valley stage.	N '37 p7
Sam Ball, veteran prospector, hands gourd of water from Lake Tulainyo to Gov. Merriam while descendants of Jayhawker Party survivors look on.	N '37 p7
Gov. Merriam draws bead on ribbon barrier, officially opening highway.	N '37 p8
Death Valley section, looking towards Furnace Cr.	N/D '45 p8
Bad Water, lowest point in US.	N/D '45 p8
New alignment on near Owens River Br.	M/A '55 p19
End of project near Keeler.	M/A '55 p20
Beginning of project near junction with US 6/395.	M/A '55 p20
Junction of old and new alignments.	M/A '55 p20
Towne's Pass highway entrance to Death Valley National Monument, before and after views of newly realigned section.	Jun '38 p25
20-mule team and borax wagons on US 395 near Lone Pine, date unknown.	J/A '60 p54
<b>US 395; Sherwin Grade</b>	
Typical lava rock cut and junction with old high-way at foot of grade.	N/D '56 p39
Aerial view of new highway on bridge with old road.	N/D '56 p40
Looking northerly toward Bishop and White Mts. from north end of project.	N/D '56 p40
Looking north from middle of project showing borrow areas on left.	N/D '56 p40
4-lane section near Rock Cr. Canyon.	N/D '56 p40
Volcanic pumice cut looking toward Bishop.	N/D '56 p41
Typical long tangent on new highway.	N/D '56 p41



## ROUTES, Continued

### Kern Co.

#### Bakersfield

Alfred Harrell Hwy. (FAS 885) looking east toward Panorama Dr.	M/A '60 p44
Garces Circle, improvements made to	M/A '57 p56+
Northbound frontage road entering Circle.	M/A '57 p57
Looking easterly along off-ramp from Rt. 99 to Garces Circle.	M/A '57 p57
Stretch of second-story concrete paving.	M/A '57 p58
Grove St.; four traffic lanes provided from center of city to south city limits.	S '37 p27
Section south of Bakersfield showing new wider traffic lanes.	S '37 C
N. Chester Ave. at entrance to county fair ground.	Jun '42 p16
Pierce Rd. relocation, looking northerly from Olive Dr.	J/F '49 p20+
Pierce Rd. Rotary and Rt. 99, aerial view.	J/F '49p19
Truxtun Ave. after widening and improvement.	N/D '60 p37
Union Ave. after improvements	N/D '47 p7
Intersection of Union Ave. and 24th St.	M/J '55 p18
Union Ave. at intersection with Rt. 99.	M/J '55 p19
Union Ave., Bakersfield after widening.	J/A '60 p53

#### I-5 [US 99]

##### Bakersfield-Grapevine Hwy.

Site of proposed new 4-lane divided highway north of Bakersfield.	Jan '43 p15
Old state highway will become southbound roadway of new highway.	Jan '43 p15
Existing trees will form a screen between the two roadways.	Jan '43 p15
Trees permitted to grow down to ground to form screen.	Jan '43 p15
Contractor's trucks on new future southbound lane of highway.	Jun '38 p8
Old road, which is being converted into a 4-lane divided highway.	Jun '38 p9
Section in Grapevine Canyon with metal plate road divider and concrete flume for creek.	M/A '43 p2
Grapevine Canyon, showing proposed fill and highway widening.	F '41 p19

##### Ridge Route-Grapevine Canyon--See also Los Angeles Co.

Steep cuts through Ridge Route, ca. 1915.	J/F '61 p7
Section of Ridge Route, 1920s.	J/F '61 p7
Old winding highway on Grapevine Grade.	S/O '50 p141
Section of portland cement concrete pavement near Fort Tejon.	Jul '37 p20
Completed section northerly from Gorman.	J/F '52 p29+
Special blocks on concrete apron to dissipate force of water at discharge of channel on west side of road near Gorman.	J/F '52 p29
Aerial view at Lebec; Completed section southerly of Gorman.	J/F '52 p31
Grapevine Grade showing ca. 1957 highway, and old 1914 highway.	J/A '58 p11
Grapevine Canyon indicating location of proposed additional lanes.	J/A '58 p12
Grapevine Gorge section, looking north toward Bakersfield.	S/O '58 p42
Grapevine Grade section under construction near Ft. Tejon overcrossing.	S/O '59 p7+
Widened section through Grapevine Canyon.	S/O '60 p5
Temporary bridge constructed over highway for earth hauling purposes.	S/O '60 p6
Looking north from the canyon toward Grapevine Undercrossing.	S/O '60 p6
Looking north into canyon from section near Wheeler Ridge truck scales.	S/O '60 p7
Construction underway for Grapevine Grade widening project.	J/F '60 p37
Future bypass freeway route near Wheeler Ridge.	N/D '61 p18
Widened section of Ridge Route at Lebec.	N/D '64 p7
Eight-lane I-5 between Lebec and Ft. Tejon.	J/F '65 p21
Brake inspection/rest area along I-5.	J/F '65 p21+
Down-canyon view near Lebec; Southward view near Lebec.	J/F '65 p23
I-5 descending Grapevine Grade into San Joaquin Valley.	J/A '66 p25

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Kern Co., Continued**

- Main St. Mojave, 1909.; Mojave 1912, and 1937, after new construction. F '38 p18  
Oildale; FAS 887 expressway on Manor St. M/A '60 p43  
Oilfield road in use near Rosedale. N '38 p2  
Poorly drained highway with stranded horse and buggy. S/O '50 p93  
**Rt. 14 [US 6],** section through Red Rock Canyon. May '41 p6  
Dip in Rt. 14 through Red Rock Canyon replaced by fill and culvert. May '41 p6  
Completed section of improved road north of Mojave. S/O '58 p10  
Improved section at junction with Rt. 46 [US 466]. S/O '58 p11  
Expressway work in progress in Red Rock Canyon. S/O '58 p12  
Red Rock Canyon section prior to improvement in 1929. J/F '60 p73  
Same section after modernization, 1959. J/F '60 p73  
Old highway crossing of main wash of Red Rock Canyon. M/A '60 p47  
Realigned 4-lane section climbing out of main wash. M/A '60 p49; N/D '60 p69  
**Rt. 33 [Leg. Rt. 138];** Taft-Maricopa Hwy., official group at dedication. F '38 p21  
View of highway looking southerly in direction of Maricopa. F '38 p21  
**Rt. 41 [Cholame Lateral];** Cottonwood Pass, section of new, wide 2-lane highway. S '41 p22+  
**Rt. 46 [US 466]**  
**Keene-Tehachapi Hwy.**  
Fill above main line of SP tracks under construction near Cable. N/D '47 p1  
Toe wall for support of riprap at channel change under construction. N/D '47 p11  
Heavy excavation near Keene Sanitarium. N/D '47 p12  
Section of completed highway. N/D '47 p12  
Official group at Tehachapi ribbon cutting ceremony. N/D '48 p39  
Tehachapi-Keene highway crossing Tehachapi Overhead. N/D '48 p40  
**Mojave-Boron Hwy.** before improvement. M/J '56 p70  
Newly completed section of desert highway. M/J '56 p70  
Section between Mojave and Boron. M/J '56 p71  
Construction underway on big cut for realignment east of Bakersfield. S/O '59 p8  
Relocation operations underway east of Bakersfield. S/O '59 p55  
Improved section of Rt. 46 [US 466] in eastern Kern Co. N/D '61 p11  
Improved section near Arvin Turnoff. M/A '61 p35+  
Reinforced concrete ditch-check series in operation; Subgrade trimmer. M/A '61 p37  
Metal pipe velocity dissipater installed for roadway surface drain. M/A '61 p37  
Improved section near Caliente Rd. M/A '61 p38  
**Rt. 58 [Rt. 178]**  
Bakersfield-Mojave Hwy., a narrow, winding road with many curves. N '38 p3  
Tehachapi Pass section after realignment. Jan '40 p6+  
Construction in mountainous terrain west of Tehachapi. N/D '64 p70  
**Rt. 65 [Orange Belt Hwy.]**  
Equipment and crews on section of Ducor Cut-off. May '40 p8  
Crew finishing slope on section of cut-off. May '40 p9  
Graded roadway nearly completed; Shovel purchased by county for project. May '40 p9  
Looking north over portion of Ducor Cut-off. Jan '42 p24  
Section of Ducor Cut-off south of Poso Creek. Jan '42 p24  
**Rt. 99 [Rt. 4]**  
Divided highway south of Bakersfield. Jan '39 p8+  
New lanes for southbound traffic just added to divided highway, with old highway now reserved for northbound traffic. Jan '39 p10  
Old divided Rt. 99 near Rt. 99/Rt. 46 [Rt. 466] separation. J/A '57 p9  
Section near Beardsley Canal, existing highway used as north-bound lane. J/F '49 p21  
Looking northerly from south end of overpass at main line tracks of SP. J/F '49 p22  
Improvements on US 99 south of Bakersfield. N/D '49 p57

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Kern Co., Continued**

Crossover about two miles south of Bakersfield. N/D '49 p58  
 Section at Oildale Overhead north of Bakersfield. S/O '54 p1

**Delano Bypass**

Normal traffic through Delano before bypass. J/A '56 p29  
 Approaching N. Delano Overhead Crossing. J/A '56 p30  
 Section at south end of project. J/A '56 p30  
 Approaching Airport Rd. Overcrossing looking southerly. J/A '56 p31  
 Approaching Cecil Ave. Overcrossing looking southerly. J/A '56 p31  
 Completed Delano Bypass. S/O '58 p39  
 S/O '58 p43

Rt. 119 [US 399] relocated around Hill 36 near Ford City and Taft.

Rt. 155 [Rt. 142]

Divided road at northerly approach to new and old bridges over Kern River. Jun '42 p16  
 4-lane highway north of Bakersfield looking across Beardsley Canal Br. Jun '42 p14

Rt. 178 (Walker Pass Rd.) near Weldon looking east. S/O '58 p11

Section looking north from the west end of the main dam at Lake Isabella. S/O '58 p41

**Kings Co.**

Rt. 41 relocation at junction with existing highway at Kettleman City. J/A '59 p45  
 Completed Rt. 41 project through Kettleman Hills. S/O '59 p7

Rt. 198; Channelized intersection at Lacy Blvd., with sodium vapor lamp  
 amber flashers and red reflectors. Aug '39 p22

Portion of realigned Rt. 198 through Henford. Aug '39 p23

Utica Ave., future location of I-5 interchange. M/A '66 p37

**Lake Co.**

Rt. 20 [Rt. 15]

Widened roadway and parking area along the north shores of Blue Lakes. Aug '39 p8+  
 Tule Lake fill; Flooding of Tule Lake fill. S/O '51 p47+

Laurel Dell Lake, showing cuts for Laurel Dell-Tule Lake project. J/A '55 p16

Construction underway along shore of Laurel Dell Lake. J/A '55 p17

New grade on Rt. 20 project. J/A '55 p17

Construction operations at intersection with Scott's Valley Rd. J/A '55 p17

East Branch Russian River realignment

Realigned section descending from summit traveling easterly. M/J '57 p4

Traveling west approaching summit and Mendocino-Lake Co. line. M/J '57 p4

Rt. 53 looking toward Clearlake Highlands during construction. J/A '58 p42

Relocated section of Rt. 53 between Cache Cr. and Rt. 20 junction. N/D '59 p39+

**Lassen Co.**

**Rt. 36**

Completed improvement project between Bird Flat and Doyle. N/D '46 p11

Curve on old alignment near Susanville; Rt. 36 relocation near Susanville. S/O '64 p45

Rt. 36/US 395 intersection before relocation. S/O '64 p46

Completed expressway at new Rt. 36/US 395 junction. S/O '64 p46

Rt. 44 [Rt. 20], Feather Lake Hwy. after improvement. N/D '61 p44

Susanville-Adin Hwy., California's longest FAS route, after improvement. S/O '56 p24

US 395 [Rt. 73] looking toward Secret Valley maintenance station. S/O '46 p13

Highway near Viewland. S/O '46 p14

Oiled earth road to Ravendale continues where resurfacing ends. S/O '46 p14

Improved Secret Valley section. N/D '53 p40

Section of old road. N/D '53 p41

Improved section south of Ravendale. M/A '58 p11

## ROUTES, Continued

### Los Angeles Co.

#### Burbank Blvd., Burbank

- Looking northwesterly from the vicinity of Burbank Blvd. J/F '50 p14
- New alignment seen from junction with San Fernando Blvd. J/F '50 p15
- Burbank Blvd. intersection. J/F '50 p15

#### Compton Blvd., widened section in Compton.

J/A '60 p50

#### Crenshaw Blvd., widened to six lanes, with median and frontage streets.

J/A '60 p49

#### Dead-end street Serrano Place south from Lemon Grove Ave., L.A.

M/A '45 p28

#### Dead-end street Los Arboles Lane, San Marino.

M/A '45 p29

#### Embankment materials/disposal sites

- Compacted embankment for San Diego Fwy. in Torrance acquired from excess excavation on Harbor Fwy. M/J '60 p22

#### Disposal sites with compacted embankments near Glendale-Golden State Fwy. interchange.

M/J '60 p23

#### Proposed alignment of Santa Monica Fwy. between Vermont Ave. and Budlong St., site of stockpiled embankment material.

M/J '60 p24

#### Embankment material being placed by private contractor.

M/J '60 p24

#### Disposal sites on Golden State Fwy. near Riverside Dr.

M/J '60 p25

#### Figueroa St. [Rt. 165] looking north from C St. in Wilmington.

J/F '45 p3

#### Figueroa St./Vernon St. intersection traffic jam, Los Angeles.

J/A '45 p30

#### Foothill Blvd.--See also I-210, Foothill Fwy.

##### Sunland ; typical view of completed roadway.

F '38 p11

##### View easterly over new bridge across Big Tujunga Wash overflow channel showing old sharply curving alignment.

F '38 p11

#### Fourth St. Cut

##### Intersection of 4th St. and Beaudry Ave. showing one-way ramp over Harbor Fwy. leading to Figueroa St.

M/J '56 p15

##### Grading operations near Hope St.; Same location, completed.

M/J '56 p16+

##### Grading operations across Grand Ave.; Same location, completed.

M/J '56 p15

##### Falsework for Hope St. Bridge on 4th St.; Same location, completed.

M/J '56 p15

##### Auto caravan lines up following dedication ceremonies for 4th St. project.

M/J '56 p19

##### Official party at ribbon-cutting ceremony.

M/J '56 p20

#### Garvey Ave. [Rt. 26; Los Angeles-Pomona Lateral]

##### Sketch of new L.A.-Pomona Lateral "superhighway".

Apr '37 p4

##### Views of realigned L.A.-Pomona Lateral.

Apr '37 p5

##### Completed section of pavement, widened from 3 to 4 lanes, west of Pomona.

Apr '37 p5

##### Line of trucks dumping material used in laying additional strip of pavement.

Apr '37 p5

##### Concrete mixer and mechanical finishers operating on Garvey Blvd. near Kellogg Hills, one of links in new highway.

Apr '37 p5

##### Building Garvey Ave. "superhighway" in 1937.

S/O '64 p52

#### Huntington Dr. in S. Pasadena, widened to accommodate six traffic lanes, two parking lanes, and an 18-ft median strip.

J/A '60 p48

#### I-5; Ridge Route/Grapevine Canyon section [US 99]--See also Kern Co.

##### Section of Grapevine Grade/Ridge Route ca. 1914.

J/F '52 p25; J/A '58 p11

##### Constructing original Ridge Route with four-horse Fresno scrapers, 1915.

S/O '65 p21

##### Big Cut on first Ridge Route highway, 1915.

S/O '65 p20

##### Steep cuts through Ridge Route, ca. 1915.

J/F '61 p7

##### Section of Ridge Route, 1920s.

J/F '61 p7

# **ROUTES Los Angeles Co., Continued**

## **Castic section**

Controlled traffic using route while heavy grading is in progress.	M/A '48 p11
Heavy excavation cut operations on Ridge Route	M/A '48 p12
Heavy grading on five-mile grade near Castaic.	M/A '48 p21
Completed sections north of Castaic.	J/A '48 p18; J/A '49 p21
Completed section at Rt. 126 [Rt. 79] intersection.	J/A '49 p18; J/A '53 p6
Grading operations on portion of Ridge Route near northern end.	J/A '49 p19
Santa Clara River-Pico Canyon section, completed.	J/A '49 p21
Completed construction near Pico Canyon.	J/A '49 p22
Piru Gorge section south of Gorman.	N/D '45 p7; S/O '50 p137
Section through Piru Gorge on Ridge Route before widening.	N/D '50 p30
Blasting in Pyramid Cut in Piru Gorge.	N/D '50 p31
Big job for bulldozers in Piru Gorge.	N/D '50 p43
General view of Piru Gorge.	N/D '50 C
Borrow pit for selected base material and mineral aggregate.	J/F '50 p31
Section near Gorman Cr. looking northerly.	J/F '50 p32
Section in Piru Gorge, showing Pyramid Cut.	J/F '52 p27+
Completed section at Piru Creek Br.	J/F '52 p27
View south from Pyramid Cut.	J/F '52 p28
Piru Gorge section, showing proposed new route.	S/O '65 p28
Weldon Canyon section	J/F '52 p46+; J/A '53 p4+; J/F '54 p39; S/O '54 p3
Weldon Summit, with excavation slope flattened to eliminate slides.	J/A '53 p6
San Fernando reservoir skirted by Sepulveda Blvd.	J/F '54 P4
Portion of half-million-yard fill under construction.	J/F '54 p40
Fill-compacting operations underway on section of freeway approaching Owens Valley-Los Angeles aqueduct crossing.	J/F '54 p41
Heavy construction near Tunnel Station looking southeast.	S/O '54 p1
Section at interchange with Sepulveda Blvd.	J/F '56 p65
Grapevine Grade showing present 1957 highway.	J/A '58 p11
Aerial view indicating location of proposed additional lanes.	J/A '58 p12
Widened section through Grapevine Canyon near Ft. Tejon Overcrossing.	S/O '60 p7+
I-5 in vicinity of Castaic Junction showing old route of former US 99.	M/A '65 p46
Ridge Route section of I-5.	J/A '66 p24
Tejon Summit area showing present route and proposed realignment.	S/O '65 p22
Liebre Gulch section showing proposed new route.	S/O '65 p28
Ridge Route as seen from Paradise Ranch.	S/O '65 p29
Horses grazing near Castaic on land earmarked for future development.	S/O '65 p30

## **I-5; Golden State Fwy. [US 99]**

Construction in Burbank at interchange with Alameda Ave.	J/F '57 p5; J/F '59 p26
Construction progress in Griffith Park area near Los Feliz Blvd.	J/F '57 p10; J/F '58 p7
View of construction from above Griffith Park.	J/F '57 p10
L.A. near Hollenbeck Park Lake and 6th St. showing proposed route of freeway and right-of-way clearing operations.	J/F '57 p11
Completed section in Griffith Park area near Park Rd Overcrossing.	S/O '57 p21
Section under construction at Los Angeles Rvr. and Riverside Dr.	S/O '57 p24
Construction in Burbank showing cloverleaf interchange with Alameda Ave.	S/O '57 p24
Construction nearing completion between Allan Ave. and Alameda Ave.	S/O '57 p25
Construction nearing completion in Griffith Park near Los Angeles Rvr.	S/O '57 p25
Colorado Blvd. connection with Golden State Fwy.	J/F '58 p7
Construction in Boyle Heights area of East L.A. near Hollenbeck Park.	J/F '59 p42
Grading operations in Lincoln Heights area.	S/O '59 P11
Completed section in Burbank.	S/O '59 p11

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

Construction near future interchange with San Bernadino Fwy.	S/O '59 p16
Completed section at junction with San Bernadino Fwy.	N/D '60 p41
Completed section showing Los Feliz Blvd. overcrossing and on/off-ramps.	S/O '59 p17
Construction on Roscoe Blvd.-Lankershim Blvd. unit near Sun Valley.	N/D '60 p16
Los Angeles Fwy Loop section under construction at Roscoe Blvd.	J/F '61 p15
Fill stockpiles placed prior to construction.	J/F '61 p17
Construction underway near Burbank Blvd.	J/F '61 p19
Construction in progress looking north from Hollywood Way.	J/F '61 p21
Construction at Lankershim Blvd.	J/F '61 p21
Completed section in Burbank looking north from Western Ave.	J/F '61 p21
Construction progress near Elysian viaduct.	M/A '61 p7
Completed section in vicinity of Burbank, part of future "loop bypass."	N/D '61 p66
Completed section at junction with San Diego Fwy.	M/A '64 p20
Riders following bridal path alongside Golden State Fwy. near Griffith Park.	M/A '64 p20
<b>I-5; Santa Ana Fwy. [I-105; US 101]--See also <i>ROADSIDE BUSINESSES; TRAFFIC</i></b>	
Section near 6th St. Bridge, 1941; Same location, 1955.	J/A '55 p8
Fill in process of construction as seen from 6th St. Br.	M/A '46 p25
Reinforcing existing storm drain, as viewed from 6th St. Br.	M/A '46 p25
Santa Ana Fwy. right-of-way cleared and ready for roadway construction.	M/J '48 p16
Section at 6th St. Viaduct.	J/A '48 p1
Section looking toward 4th St. Overpass grade separation.	J/A '48 p14
Santa Ana Fwy. at 7th St. grade separation.	J/A '48 p15
Construction west of Indiana St. grade separation.	S/O '48 p42
Construction on Soto St.-Eastman Ave link of Santa Ana Fwy.	M/J '49 p44+
View westerly from Rt. 10 [Olympic Fwy.] grade separation.	M/J '49 p46
Section near Grande Vista St. showing Lorena St. grade separation.	M/J '49 p46
Aerial view of construction area near Atlantic Blvd.	M/J '49 p49; M/J '50 p32
La Verne-Eastland unit before opening to public traffic.	M/J '50 p33
Santa Ana Fwy., L.A.	S/O '50 p107
Santa Ana Fwy. from east Los Angeles city limits near Indiana St.	M/A '52 p6
Bishops Rd. excavation-materials disposal area.	S/O '52 p17+
Section approaching L.A. Civic Center, City Hall.	N/D '52 p16
Proposed location of "Norwalk Diagonal" intersection of Firestone Blvd. and Rosecrans Ave.; Grading operations on Norwalk Diagonal.	N/D '52 p19
Rosecrans-Firestone intersection near Norwalk, 1952; Same location completed to full freeway standards in 1955.	M/A '56 p45
Construction near Rio Hondo Br.	M/A '53 p14
Completed section near Atlantic Blvd. and Union Pacific RR	M/A '53 p15
Section between Grand Ave. and Lincoln Ave.	J/F '54 p3
Completed section near "mixmaster" interchange.	J/F '54 p7
Section from Shoemaker Ave. Br. to Valley View Ave.	S/O '55 p9
East L.A. section between 4th St. and 6th St.	S/O '55 p11
Paving operations for Camulos St.-Olympic Blvd. section.	M/J '56 p58
Typical conditions before construction of Camulos St.-Olympic Blvd. section	M/J '56 p58
Completed widening operations.	M/J '56 p59
Mulholland borrow pit.	J/A '57 p69
CHC inspecting the Ventura-San Diego Fwy. extension under construction in San Fernando Valley at Sherman Oaks.	J/A '57 p70
Construction progress in Haskell Ave. area.	J/A '57 p71
View southerly across interchange roadway near Ventura Blvd. Br.	J/A '57 p71
Section near Euclid Ave. Interchange.	J/F '58 p8

# **ROUTES Los Angeles Co., Continued**

Added westbound lane near Spring St.	S/O '59 p22
Widened section near Long Beach Fwy. interchange.	M/A '61 p13
I-5 "westward through miles of small cities and suburban areas."	J/A '66 p24
Route through San Gabriel Mts.	J/A '66 p24
<b>I-10; San Bernadino Fwy. [Ramona Fwy., Rt. 26]</b>	
Pomroy St. on/off-ramps.	M/A '45 p24+
Looking west from Eastern Ave. overcrossing.	M/J '50 p30
View of future freeway site near City Terrace.	M/J '50 p31
City Terrace area of freeway.	M/A '52P13
Section at Eastman Ave. overcrossing.	
Rosemead Blvd., with completed construction for underpass with PE Railway.	S/O '51 p14
Construction near Warwick Ave.	J/F '52 p17
View easterly from Almansor Ave. along eastbound roadway.	J/F '52 p18
Floral Park on-ramp.	J/F '52 p19
Pile driving operations on section of Ramona Fwy.	J/A '52 p57
Construction at Atlantic Blvd.	M/A '53 p9
Completed section between Eastman Ave. and Fremont Ave.	M/A '53 p10
Pomona; proposed freeway route, L.A. Co. Fairgrounds, and Ganesha Park.	M/A '53 p20
Proposed route of freeway through Pomona, and initial unit of Liberty Homes development near Valley Blvd.	M/A '53 p22
Ribbon cutting ceremony on Ramona Fwy. at Fremont Ave.	J/A '53 p15
Caravan of official cars on Ramona Fwy. nearing Fremont Ave.	J/A '53 p15
Outbound lanes of completed section of freeway.	J/A '53 p16
Finishing operations in progress, Pomona-Claremont unit.	N/D '54 p7
Section between Ganesha Ave. Br. and Rt. 71/I-10 [Rt. 77/26] separation.	N/D '54 p7
Completed section between Dudley St. Br and Ganesha Ave. Br.	N/D '54 p7
Section showing Ganesha Ave. Br. and westbound inlet ramp.	N/D '54 p11+
Palms, orange groves border section in Claremont near Alexander Ave.	M/A '55 p24
Ribbon-cutting ceremony at San Gabriel Ave.-Rosemead Blvd. dedication.	M/A '54 p47
Gov. Knight operating bulldozer at Rosemead Blvd. ground-breaking.	S/O '54 p21
Peak hour traffic on San Bernadino Fwy. approaching Soto St.	J/F '55 p20
Section at Rt. 71 [Garvey Ave.] junction, and environs of Pomona.	J/F '55 p22+
Section at Garfield Ave.	J/F '56 p63
Construction in El Monte.	J/F '56 p63
Gov. Knight cutting ribbon at dedication of El Monte unit.	J/A '56 p52
Completed section through Alhambra and Monterey Park.	J/A '56 p37
Construction operations approaching Pomona.	J/A '56 p37
Approaching routes I-405/I-10 [158/26] separation on Rosemead Blvd.	J/A '56 p38
View of freeway from Barranco St. Overcrossing.	J/A '56 p39
Paving operations at eastern end.	J/A '56 p40
Grading between Pomona and W. Covina.	J/A '56 p40
At junction with Rosemead Blvd., showing interchange and frontage road.	J/A '56 p41
Approaching River Grade Rd. Undercrossing.	J/A '56 p42
Peak hour traffic in summer 1955, before installation of guard rail in median.	M/A '56 p46
Completed freeway in Baldwin Park.	M/J '57 p25
Completed section from Kellogg Hill summit cut near Pomona.	M/J '57 p26
Aerial view of San Bernadino Fwy. through El Monte.	J/F '59 p17
Widened section at El Monte near Baldwin Ave. interchange.	M/A '61 p13
San Bernadino Fwy. near Covina.	N/D '61 p20
San Bernadino Fwy. near shopping center	S/O '64 p53



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

**I-110; Harbor Fwy.--See also TRAFFIC**

Construction at third street overcrossing.	M/A '51 p12
View from Temple St. of cleared right-of-way for Harbor Fwy.	M/A '51 p13
Official group at ground breaking ceremonies.	J/A '51 p16
Harrison Baker (CHC) points to cornerstone of Francisco Street Br., the start of Harbor Fwy. in 1948.	J/A '51 p62
Section near Temple St., Four-level structure in background.	S/O '52 p23
Aerial view of construction between Beaudry Ave. and Figueroa St.	M/A '52 p16
Marine helicopters landing on freeway.	J/A '52 p59
Section near 8th St. undercrossing.	M/A '53 p5
Construction between 9th St. and 3rd. St., and Statler Hotel.	M/A '53 p11
Harbor Fwy. at Four-level traffic interchange.	J/F '54 p9
Construction from 3rd. St. southerly.	J/F '54 p12
7th St.-3rd St. section showing downtown Los Angeles.	J/F '54 p14
Proposed route near Flower and Figueroa St. showing cleared right-of-way.	M/J '54 p2
Evening peak hour traffic on Harbor Fwy. at 5th St.	M/J '54 p3
Proposed routing near L.A. Co. Sanitation Plant.	M/J '54 p4+
Aerial view of freeway from 9th. St. as it passes Statler Hotel.	M/J '54 p6
Proposed route showing diversion around productive oil wells.	M/J '54 p7+
Proposed route near Figueroa St. and Shell Oil Co. refinery.	M/J '54 p8
Looking east on Slauson Ave. near future route of Harbor Fwy.	M/J '54 p10
View from under on-ramp bridge for southbound traffic from 5th St.	M/J '54 p10
Looking southerly with Statler Hotel in background.	M/J '54 p10
Heavy northbound traffic passing under 4th St. overcrossing.	M/J '54 p10
Southerly view, showing off-ramp to 6th St.	M/J '54 p11
View southerly showing 4th St. Bridges in center.	M/J '54 p11
Proposed route near Figueroa St., showing adjacent housing developments.	M/J '54 p13
Proposed location halfway between Broadway and Figueroa St.	M/J '54 p14
Completed section at Pico Blvd. showing turnout for northbound traffic.	J/A '54 p46
Portion of retaining wall and stairway at Oak St.	J/A '54 p46
Official party man shovels at Harbor Fwy. Battery St. dedication.	S/O '54 p29
Approaching 4th St. bridges.	J/F '55 p26
Harbor Fwy. in vicinity of downtown L.A.	J/F '55 p27
Right-of-way cleared of buildings for future Harbor Fwy. construction.	J/F '55 p29
<b>Wilmington-San Pedro section</b>	
Contractor's haul road through Union Oil refineries area.	J/A '55 p57
Loaders dumping into excavation area.	J/A '55 p58
Excavation area and haul road through oil refinery.	J/A '55 p59
Ribbon-cutting ceremony for Willmington-San Pedro unit.	J/A '56 p53
Harbor Fwy. from 4th St. in 1951 during construction of Statler Hotel.	J/F '56 p60[
Peak hour traffic at same location, 1956.	J/F '56 p60
Right-of-way area clear of all improvements near Santa Barbara Ave.	M/A '56 p39
Official party at ribbon cutting ceremony for Harbor Fwy. section.	S/O '56 p20
Construction on Harbor Fwy. near 79th St.	S/O '56 p21
Section of freeway near Flower St.	S/O '56 p22
Section near Santa Barbara Ave.	S/O '56 p22
Construction on Harbor Fwy near 49th St.	S/O '56 p23
Construction near Slauson Ave crossing, looking northerly.	J/F '57 p5
Section through downtown LA. showing 4th, 5th and 6th St. bridges.	J/F '57 p17
Gov. Knight and official party at ribbon-cutting for Santa Barbara Ave.- 88th Pl. unit.	M/J '57 p41
Auto caravan on Harbor Fwy. following ribbon-cutting.	M/J '57 p42

California Highways and Public Works  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

Completed section looking north from Manchester Ave.	J/F '58 p1
Section from Wilshire Blvd. Br. to Four-level Interchange.	J/F '58 p5
Construction progress looking north from above 124th St.	J/F '58 p5
Section of Harbor Fwy. in downtown Los Angeles.	N/D '58 p7
View southward from Manchester Ave. interchange.	J/F '59 p23
Slip ramp which handles traffic from distributor road to 5th St. inlet.	S/O '59 p21
Harbor Fwy. through downtown L.A. showing parking space areas which came available as obsolete buildings were torn down.	J/F '60 p17
Completed section of Harbor Fwy. near 146th St. pedestrian overcrossing.	M/A '61 p9
Harbor Fwy.	M/J '66 p14
<b>I-210; Foothill Fwy.</b>	
Construction looking south toward Highland Ave. cut.	J/A '54 p50
Aerial view of Foothill Blvd. looking westerly across Devil's Gate Dam.	S/O '55 p41
<b>I-405; San Diego Fwy.--See also LANDSCAPE &amp; LANDSCAPE MAINTENANCE</b>	
Proposed route of San Diego Fwy. in Sherman Oaks area.	J/F '57 p14
View looking northerly across interchange roadway from Camarillo Ave.	J/A '57 p68
Gov. Knight using Swedish bucksaw to cut barricade at opening of West L.A. section of San Diego Fwy.	M/A '57 p33
West L.A. section from Sunset Blvd. overcrossing looking south.	M/A '57 p34
San Diego Fwy. between Wilshire Blvd. and Sunset Blvd.	J/F '58 p11
Completed section near Sepulveda Blvd. Flood Control Dam.	M/J '60 p9
Completed section near Dana Point.	M/A '61 p15
Construction underway near Sepulveda Blvd. and Mulholland Dr.	M/A '61 p19
Construction in progress at junction with relocated Lakewood Blvd.	M/A '61 p14
Grading on Santa Monica Mts. route near Sepulveda Blvd. Bridge.	N/D '61 p68
Section between Long Beach Fwy. and Atlantic Ave. in Long Beach.	M/A '64 p26
San Diego Fwy. under construction near Whittier Narrows Dam.	M/A '64 p31
Dedication ceremony for Los Angeles-Orange Co. unit of San Diego Fwy.	M/J '65 p33
San Diego Fwy. at Willow St. undercrossing.	M/J '65 p34
San Diego Fwy. over Sepulveda Pass.	M/J '66 p14
San Diego Fwy. at south edge of San Fernando Valley near Ventura Fwy.	J/F '67 p43
San Diego Fwy. under construction at interchange with San Diego Fwy.	M/J '66 p14
Section of I-405 through "big cut" over Santa Monica mountains.	J/A '66 p24
<b>I-605; San Gabriel River Fwy.</b>	
Section near Rose Hills Rd.	J/A '64 p34
Tract houses in Norwalk showing cleared land for I-605 right-of-way.	J/A '64 p36
California Country Club straddles the freeway north of Whittier.	J/A '64 p37
Aerial view of I-605 course northward through a corner of Downey.	J/A '64 p38
San Gabriel River Fwy. looking south from Rose Hills Rd. interchange.	J/A '64 p39
Ward Duck ranch along freeway.	J/A '64 p39
Installing aluminum glare shield on I-605.	J/A '64 p40
California Country Club and Ward Duck Ranch in relation to I-605.	J/A '64 p41
Completed section north of Whittier.	N/D '64 p48
San Gabriel River Fwy. serving City of Industry.	M/J '65 p35
San Gabriel River Fwy. at Willow St.-Katella Ave Interchange, Long Beach.	J/F '67 p9
Parade of cars on San Gabriel River Fwy. following dedication.	J/F '67 p10

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

**I-710; Long Beach Fwy.**

Buildings of the US Army 822 Air Force Specialized Depot on freeway site.	M/J '51 p14
Plant of the American Brake Shoe Co. on freeway location near Slauson Ave.	M/J '51 p14
Drain construction by city of Long Beach to clear way for freeway.	M/J '51 p15
Willow St. overcrossing built by city of Long Beach to accommodate freeway.	M/J '51 p15
Richfield oil refinery which will be interfered with by freeway construction.	M/J '51 p15
Official party at ground breaking ceremonies.	J/A '51 p16
Portland cement concrete batch plant for use in construction operations.	N/D '52 p9
Paving operations near Willow St.	N/D '52 p10
At intersection with Rt. 1, Pacific Coast Hwy.	N/D '52 p14
Preliminary studies for southerly extension of Long Beach Fwy.	N/D '52 p10
Construction in progress near Anaheim St. crossing.	N/D '52 p14; M/A '53 p15
Official party at ribbon cutting ceremony for first section of Long Beach Fwy.	J/F '53 p37
Grading activity at Artesia Street Br.	J/A '53 p12
Rt. 1 (Pacific Coast Hwy.)-223rd. St. section.	J/A '53 p21
Construction operations between Atlantic Ave. and Artesia Street Br.	J/A '53 p22
Construction activity near Long Beach Blvd.	J/A '53 p22; J/A '54 p29
Section along Los Angeles River from Anaheim St. to 223rd St.	J/A '54 p16
Gov. Knight cuts ribbon at 223rd St.-Atlantic Ave. dedication ceremony.	N/D '54 p34
Completed section viewed from Pacific Coast Hwy.	J/A '54 p23
Aerial view of freeway near Del Amo Br.	J/A '54 p25
Construction operations looking northerly toward Atlantic Ave.	J/A '54 p29
Construction at interchange with Florence Ave. in East L.A.	J/F '57 p5
Completed section near Florence Ave. interchange.	J/F '58 p11
Section at interchange with Santa Ana Fwy.	J/F '56 p60; N/D '57 p5+; J/F '58 p11
Construction in progress at crossing with Los Angeles Rvr.	N/D '57 p7
Section at interchange with Atlantic Ave. and Bandini Blvd.	N/D '57 p9
Section under construction near Atlantic Ave.	N/D '57 p9
Section near Artesia Ave. cloverleaf.	J/F '58 p11
Looking south over Long Beach Fwy. toward the Harbor area.	S/O '58 p49
View northward from Olive St. Interchange.	S/O '58 p57
Construction on Long Beach Fwy. extension.	J/F '60 p7
Long Beach Fwy. terminus. near Anaheim St.	M/A '61 p3
Extension to interchange with I-10 near California State College, L.A.	M/A '65 p44
Kenmere access road near Lincoln in Burbank, after improvement.	J/F '45 p2
Kenmere, looking northerly on Buena Vista in Burbank.	J/F '45 p3
Buena Vista, south of Kenmere in Burbank.	J/F '45 p3
Long Beach traffic circle	
Reconstruction at State St., Lakewood Blvd., and Hathway Ave. intersection.	Jun '42 p9
Channelization at State St.; Hathway Ave. approach.	Jun '42 p9
<b>Los Angeles freeway system, general</b>	
Aerial view of Los Angeles freeway system.	J/F '67 p23
Arroyo Seco-Harbor Fwy at Sunset Blvd., junction with Hollywood Fwy.	J/F '55 p17
Freeway system in vicinity of Los Angeles Civic Center.	J/F '58 p26
Hollywood Fwy., Harbor Fwy., and Arroyo Seco Fwy. extending from	
Four-level traffic interchange.	J/F '54 p15
Hollywood-Santa Ana Fwy. in downtown Los Angeles.	J/A '54 p1
Hollywood-Santa Ana Fwy. at Alameda St. showing L.A. Civic Center,	
L.A. Union RR Station, Federal Building, and Four-level Structure.	M/A '53 p8
San Fernando Valley freeways	
Governor's party on contractor's haul road during inspection tour of.	M/A '58 p35
Gov. Knight looking over construction plans with other members of party.	M/A '58 p36

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

Manchester Ave. near Truxton Ave. in SW Los Angeles.	J/F '48 p13
Manchester-Firestone Blvd. [Rt. 42; Leg. Rt. 174], Downey	
Stretch of highway between Norwalk and Downey increased to 3-lane road.	May '37 p19
Gov. Merriam at ribbon-cutting; section of new highway.	Jul '37 p14
Ocean Blvd. in vicinity of Atlantic Ave. intersection, downtown Long Beach.	S/O '66 p22
<b>Olympic Boulevard [Rt. 26]--See also I-10, Santa Monica Fwy.</b>	F '37 p7
Aerial view showing the route of Olympic Blvd. east-west arterial.	F '37 p7
Proposed line through Westwood Hills golf course and property of Fox Film Co.	F '37 p7
Louisiana Ave. link.	F '37 p7
Mile of recently dedicated, opened and partially completed roadway.	F '37 p7
Pennsylvania Ave. link through Santa Monica.	F '37 p7
Section showing high class character of real estate development.	F '37 p8
Olympic Blvd. pavement stopped at Fox Film Co. property pending acquisition of right-of-way donated to the state by the company.	F '37 p8
Bridge across Olympic Blvd., connecting buildings of Fox Studio.	Jan '41 p13
Unidentified stretch of improved Olympic Blvd.	Jan '41 p13
Olympic Blvd. extension divided highway construction near Lincoln Blvd.	
Left-hand turn-lanes looking westerly across 14th St.	J/F '49 p59
Contrasting colored lanes, looking westerly across Centinela Ave.	J/F '49 p59
Outer highway adjacent to Long Beach Blvd. at 44th St. in N. Long Beach.	J/F '48 p15
Redondo Beach Blvd. [Rt. 175] divided highway development.	S/O '54 p51
Divided highway development on 174th St.	S/O '54 p51
Redondo Beach Blvd. at intersection with Crenshaw Blvd.	S/O '54 p52
Riverside Drive, a typical undivided highway.	J/A '45 p3
<b>Rt. 1, Pacific Coast Hwy. [Rt. 60; US 101-Alt.; Coast Route; Roosevelt Hwy.]</b>	
Willmington unit; official guests at ribbon cutting ceremony.	Jun '37 p9
Section of new highway looking toward Long Beach.	Jun '37 p9
Speaker's platform at dedication ceremony.	Jun '37 p9
<b>Walnut Canyon-Encinal Canyon unit</b>	
Reconstruction at Encinal Canyon; Grading operations on new highway.	Mar '38 p7
Grading, looking westerly from Walnut Canyon toward Zuma Creek.	Mar '38 p7
Division strip made of concrete curbs 4-ft. apart with planting between.	Aug '38 p22
Division strip on this portion of highway will be 4-ft. wide with raised white arrows bordered by raised white lines.	Aug '38 p23
Heavy traffic on Coast Route north of Santa Monica.	D '38 p2
Escondido Creek improvement under construction.	Apr '40 p8
New type 6-cylinder diesel tractor pulling scraper.	Apr '40 p9
Construction activities at summit cut between Latigo and Escondido Canyon.	Apr '40 p9
Line change at Latigo Canyon Rd.	Apr '40 p10
Solstice Creek-Walnut Canyon unit	
Power shovel removing deposit of sand on a beach 90-ft. above road.	Jan '41 p10
Section of four lane divided highway being completed on highway between Santa Monica and Oxnard.	Jan '41 p11
Construction scene near end of project.	M/A '47p19
Construction looking south to junction with existing route.	M/A '47p20
Long Beach; three-tower transmission structure showing counterweight fill.	M/A '47 p9
Detail of base plate for final tower adjustment.	M/A '47 p9
Malibu Creek-Las Flores unit	
View of widening operations from Carbon Point.	M/A '49 p32
Oil treatment of portion of sandy slope where widening was carried out along high cut bank easterly of Malibu Creek.	M/A '49 p33

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

- Malibu Creek and Latigo Canyon section, realigned. J/A '48 p31  
 Zuma Canyon section at intersection of Bonsall Dr and Westward Beach Rd. M/J '55 p33  
 Completed section near bridge across Arroyo Sequit Creek. M/J '55 p34  
 Section through Trancas Beach and Dunes Point. M/J '55 p35  
 Relocated section around Pacific Palisades slide area. J/F '60 p13  
 Rt. 1, Pacific Coast Hwy. near Santa Monica 1930; Same section, 1966. J/F '67 p19
- Rt. 2, Angeles Crest Hwy.--See also CONVICT LABOR; EROSION CONTROL; SNOW; TUNNELS & TUBES**
- Section showing erosion control treatment applied to fill slopes. S '37 p9  
 Grading operation on highway near Chilao, 10 miles northeast of Red Box. S '37 p9  
 Method of flattening fill slopes prior to applying erosion control treatment. S '37 p9  
 Cut under construction through decomposed granite cliffs. S '37 p19  
 Mountainous terrain to be penetrated by tunnels. Mar '41 p28  
 Views of heavy construction necessary on route. Mar '41 p29  
 General construction scene on Angeles Crest Hwy. D '42 p18+; S/O '48 p6  
 Angeles Crest Hwy. M/J '50 p42  
 Islip Summit on Angeles Crest Hwy. M/J '50 p43  
 Partially completed construction on Angeles Crest Hwy. N/D '56 p2  
 Section near Dawson's Saddle, showing attractive masonry retaining wall. N/D '56 p2  
 Section at entrance to Upper Chilao recreational area in Angeles Nat. Forest. N/D '56 p5  
 Long embankment slopes at junction of Crystal Lake and Rt. 2. N/D '56 p5  
 Buckhorn Campground and Antelope Valley viewed from Rt. 2. N/D '56 p6  
 Section near Cortelyou Springs. N/D '56 p6  
 Mt. Waterman Ski Lift on Angeles Crest Hwy. N/D '56 p7  
 Approaching Big Pines recreational area, showing side of road parking area. N/D '56 p12  
 Completed section at Blue Ridge Summit. N/D '56 p12  
 Section at junction of old road at Big Pines recreational area. N/D '56 p13  
 Cloudburst Summit section entering the Mt. Waterman winter sports area. N/D '56 p15  
 View from Cloudburst Summit showing highway winding through forest. N/D '56 p15  
 View from location 10 miles northeasterly of La Canada near Red Box. N/D '56 p15  
 Completed section 6 miles northeast from La Canada. N/D '56 p15  
 At south boundary of Angeles National Forest. N/D '56 p15  
 Frank Durkee and official party at ribbon-cutting. N/D '56 p16
- Rt. 2; Glendale Fwy. [US 66; Allesandro Fwy.]**
- Traffic backed up on Fletcher Dr. at grade crossing of SP RR, which the proposed Glendale [Allesandro] Fwy. would eliminate. M/A '52 p15  
 Future site of Glendale Fwy. near Allesandro Rd. M/J '60 p25  
 Completed section near future interchange with I-5 (Golden State Fwy.). M/A '61 p8
- Rt. 10; Santa Monica Fwy. [Olympic Fwy.]**
- Cleared route of Santa Monica Fwy. looking east from Vermont Ave. J/F '61 p16  
 Construction near Santa Fe Ave. M/A '61 p16  
 Construction near "East Loop." M/A '61 p17  
 Gov. Edmund Brown observing Santa Monica Fwy. construction. N/D '61 p11  
 La Cienega Blvd unit before barricades were removed. N/D '64 p50  
 Santa Monica Fwy between Bundy Dr. (West L.A.) and Rt. 1 (PCH). N/D '65 p12  
 Santa Monica Fwy under construction in West L.A. N/D '65 p20  
 Santa Monica Fwy. at La Brea Ave. cloverleaf interchange. M/J '65 p34  
 La Cienega Blvd.-San Diego Fwy unit. M/J '65 p45  
 Final unit under construction in Santa Monica. M/J '65 p47  
 Santa Monica Fwy. opened to junction with Rt. 1. J/F '67 p10

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

**Rt. 14; Antelope Valley Fwy.**

Drilling operations on section of Crystal Lake Rd.	M/A '59 p39+
Rugged terrain through which Crystal Lake Rd. was constructed.	M/A '59 p41
Aerial view showing alignment of road.	M/A '59 p41
Reconstructed section of route in Antelope Valley.	M/J '59 p43
Antelope Valley, showing proposed freeway route.	M/J '60 p18
Typical terrain in Antelope Valley with centerline of freeway superimposed.	M/J '60 p21
Construction near Soledad Canyon Rd. adjacent to Santa Clara Rvr.	M/A '61 p6
Drawing of planned Antelope Valley Fwy. contrasted with old Sierra Hwy. and Angeles Forest Hwy.	J/F '64 p3
Drawing of future Antelope Fwy. at Division St.	J/F '64 p4
Traffic using Sierra Hwy. near Mint Canyon before opening of new freeway.	J/F '64 p5
Antelope Valley Fwy. east of Agua Dulce Canyon Rd.	J/F '64 p5
West end of freeway near Solamint.	J/F '64 p7
Scenic section of Antelope Valley Fwy.	M/A '65 p30
Eastern terminus at Ward Rd. overcrossing.	M/A '65 p42
Seismic blast set off along relocation line through Escondido Canyon.	M/J '63 p54
Mint Canyon Cut-off-- <i>See also TUNNELS, Newhall Tunnel</i>	
Looking south on Mint Canyon short cut route showing location of proposed new highway and old alignment.	Jan '38 p11
Rough grading operations on Mint Canyon Cut-off.	Mar '40 p8
Pioneering cut and fill down natural slope in Mint Canyon Cut-Off.	Mar '40 p9
Construction on Mint Canyon Cut-off east of old Newhall Tunnel site.	N '38 p7
Widening operations to eliminate sharp curve on road to old tunnel site.	N '38 p7
Santa Susanna Mt. ridge being cut through to transform Newhall Tunnel into an open cut highway.	Jan '40 p16
4-lane section of Newhall Tunnel approach with raised central dividing strip covered with plant-mixed surfacing.	Jan '40 p17
Rt. 14 [US 6] after tunnel was eliminated.	S/O '50 p96
Section where tunnel was once situated, 1963.	M/A '64 i.cvr.
Aerial view of San Fernando Pass area.	M/A '64 i.cvr.
I-5/Rt. 14 [US 99/US 6] junction near tunnel area.	M/A '64 i.cvr.

**Rt. 19; Lakewood-Rosemead Blvds. [Leg. Rt. 168]**

Pasadena; cement treated base on Rosemead Blvd.	S/O '46 p26
El Dorado St. just east of Pasadena city limits.	S/O '46 p26
Mixing cement treated subbase on Rosemead Blvd.	S/O '46 p27
View of completed project, looking north on Huntington Dr.	S/O '46 p28
Openings in central parking strips located for safety, not convenience.	S/O '46 p28
Completed boulevard near center of project.	S/O '46 p28
Looking northerly across Beverly Blvd. intersection.	J/F '50 p17
View from vicinity of Anaheim-Telegraph Rd.	J/F '50 p17
Looking across Olympic Blvd. toward Beverly Blvd.	J/F '50 p17
View looking northerly toward Garvey Ave.	J/F '50 p53
Rosemead Blvd in Los Angeles.	J/A '52 p52
Relocated Lakewood Blvd. at Long Beach Municipal Airport.	M/A '61 p14

**Rt. 27; Topanga Canyon Blvd. during reconstruction.**

Section of reconstructed Topanga Canyon Blvd.	J/A '56 p23
	J/A '56 p25

**Rt. 60; Pomona Fwy. under construction near East L.A. Interchange.**

	M/A '65 p49
--	-------------



# ROUTES Los Angeles Co., Continued

Rt. 91 [Rt. 175]

Artesia Blvd. [St.] ribbon cutting ceremonies.	J/A '53 p11
Construction between Alameda St. and Long Beach Blvd.	J/A '53 p12
Improvement near Atlantic Blvd. intersection.	J/A '53 p13
Improvement at Lakewood Blvd. Rt. 19 [Rt. 168] intersection.	J/A '53 p13
Construction near Alameda St.	J/A '53 p13

## Rt. 110; Arroyo Seco Pkwy.-Pasadena Fwy.--See also LANDSCAPE & LANDSCAPE MAINT.

Looking north from Hermon Ave., 1933; Same section, ca. 1960-61.	J/F '61 p61
Official group at Arroyo Seco Parkway ground breaking.	Apr '38 p21
Miss Cheryl Walker, 1938 Tournament of Roses queen, moves first earth with huge tractor.	Apr '38 p21
Sunken section of Arroyo Seco Pkwy., a 6-lane freeway with parallel service roads and grade intersections, under construction.	O '39 p13
Arroyo Seco Pkwy. under construction, pre-1940.	J/F '61 p62
Same section ca. 1955.	J/F '61 p63
Completed section beginning at Glenarm St., Pasadena.	Jun '39 p10
Constructing and compacting fill for Arroyo Seco Pkwy.	Jun '39 p12
Arroyo Seco Parkway between L.A. and Pasadena.	F '40 p23
State, county and city officials inspecting completed section of parkway.	Aug '40 p14
Opened sections between Pasadena and L.A.	Aug '40 p15
Director Clark with Res. Engineer Hatfield.	Aug '40 p16
Arroyo Seco Pkwy. at Avenue 52.	Aug '40 p17
View through 3 Figueroa St. tunnels under Elysian Park.	O '40 p9
Arroyo Seco Pkwy. looking north from Ave. 60 in 1940; Same section, 1955.	J/F '61 p59
First section of Arroyo Seco Pkwy., 1940.	Aug '60 p56
Official party at ribbon cutting ceremony at Arroyo Seco Pkwy. dedication.	Jan '41 p4
Crowd in attendance at dedication.	Jan '41 p5
Autos moving to and from dedication scene.	Jan '41 p5
Gov. Olson's car leads long procession to site of official opening ceremony.	Jan '41 p5
Arroyo Seco Pkwy. looking toward Los Angeles.	Jan '41 p7
Arroyo Seco in flood period before construction of paved control channel.	Jan '41 p8
Frank W. Clark smoking peace pipe with Kawie Indian Chiefs.	Jan '41 p8
Natural sycamores preserved with masonry retaining wall.	Jan '41 p20
Open cut under construction through Elysian Park for southbound extension.	Apr '41 p9
Open cut construction paralleling Figueroa St. tunnels for northbound traffic.	Apr '41 p9
Equipment and some of the men engaged in building Elysian Park extension.	S '41 p6
Old Figueroa St. Tunnel and construction at Solano St. grade separation.	S '41 p7
Traffic hazard due drivers entering Arroyo Seco Pkwy. by way of an exit ramp reduced by placing of signs. and long, raised islands.	Jul '42 p7+
Southbound traffic approaching L. A. on Arroyo Seco extension through open cut in Elysian Park.	J/F '44 p3
Southbound traffic passing under Park Row Br., northbound through Elysian Park tunnel.	J/F '44 p3
Two-way traffic separated by different levels.	J/F '44 p4
Arroyo Seco Pkwy., general view.	J/A '45 p2
One of many attractive sections of parkway between L.A. and Pasadena.	N/D '47 p14
Fair Oaks off-ramp, which is to be replaced due to great number of wrong-way accidents originating there.	M/J '48 p8
Examples of ascending outlet on Arroyo Seco Pkwy.	M/A '51 p52
Left-side Figueroa off-ramp on Arroyo Seco Pkwy.	M/A '51 p53
Emergency parking bay on Arroyo Seco Pkwy.	M/A '51 P53
View from Elysian Park showing tunnels for outbound traffic.	M/A '52 p5



# **ROUTES Los Angeles Co., Continued**

- Arroyo Seco Pkwy. in S. Pasadena. N/D '47 p13; M/A '52 p5  
Arroyo Seco Pkwy. near S. Pasadena, 1940; Same location, 1955. J/A '55 p7  
Arroyo Seco Pkwy. in South Pasadena, 1940. S/O '64 p55  
Arroyo Seco Pkwy. as seen from above San Fernando Rd. M/A '53 p4  
At junction with Hollywood Fwy showing city of Pasadena. J/F '55 p17
- Rt. 134; Colorado Blvd.** [Colorado Fwy.; Colorado St.]  
Colorado Blvd. divided highway. Aug '41 p17  
Tournament of Roses Parade down Colorado St. on New Year's Day, 1955. J/A '56 p34  
Completed Colorado Fwy. near Eagle Rock. J/F '56 p59
- Rt. 170; Hollywood Fwy. extension--See also US 101, Hollywood Fwy.**  
Right-of-way clearance for extension along Big Tujunga Wash adjacent to new shopping development. J/F '57 p6  
Hollywood Fwy. extension under construction near Moorpark St. J/F '58 p13  
Extension under construction near Lankershim Blvd. J/F '58 p14  
Extension looking northward from Lankershim Blvd. J/F '60 p3  
Rt. 170, Hollywood Fwy. extension. J/F '67 p9  
Extension under construction near Ventura Fwy. interchange. M/A '65 p44
- San Fernando Rd. (Bus-I-5) [US 99]  
Shaping roadbed through the industrial area of San Fernando. M/J '50 p29  
Construction operations near northerly end of contract. M/J '50 p29  
Congested traffic on San Fernando Rd. [US 99] at MacLay Ave. M/J '50 p28  
Santa Anita Ave. in Arcadia at intersection with Camino Real Ave. M/A '56 p34  
Sepulveda Blvd. Aug '41 p14
- Terminal Island Fwy.--See also EROSION CONTROL**  
Terminal Island Fwy. undercrossing looking east along State St. (PC Hwy.). N/D '47 p26  
Looking toward L.A., Terminal Island undercrossing. N/D '47 p28  
Section near Cloverdale connections. S/O '48 p11  
Terminal Island Fwy looking south toward Cerritos Channel Br. S/O '48 p12  
Looking northeasterly toward Anaheim St. Viaduct over UP, SP and PE Railroad tracks, and Anaheim and I Streets. S/O '48 p13  
Looking toward Anaheim St. Viaduct. S/O '48 p30
- Topanga Canyon road near Santa Monica, slip-out during heavy storm. Jan '40 p11
- US 101; Hollywood Fwy.** [Cahuenga Fwy.]--See also **LANDSCAPE; TRAFFIC**  
Section of Hollywood [Cahuenga] Fwy. J/F '46 p34  
Section near underpass beneath PE tracks at Highland-Cahuenga intersection. Jul '40 p2  
Celebrities Gene Autry, Tom Keene, and Richard Arlen with official group at dedication of first unit. Jul '40 p3  
Section of Cahuenga Pass looking north toward Barnam overpass. Mar '41 p24  
General view of section looking south, near Mulholland Dr. overhead. Mar '41 p25  
Railroad tracks being moved during construction. Mar '41 p25  
Completed six-lane freeway through Cahuenga Pass. M/J '44 p6  
Completed section near Barnam Blvd. grade separation overcrossing. M/A '49 p21  
Freeway near Barnam Blvd., and fence constructed to protect pedestrians. M/A '49 p23  
Completed section near Barnam Blvd. showing rail rapid transit provisions. M/A '49 p23  
Ft. Moore Hill portion to be removed for Hollywood Fwy. M/J '49 p19  
Ft. Moore Hill, showing historic L.A. High School, which would have to be moved. M/J '49 p17  
North end of Ft. Moore Hill. M/J '49 p18  
Ft. Moore Hill-Broadway Tunnel section before excavation, showing old L.A. High School and L.A. City Board of Education buildings. S/O '52 p20  
Same location after excavation and removal of tunnel. S/O '52 p21  
Ft. Moore Hill before freeway construction, 1948; Same location, 1955. J/A '55 p9

California Highways and Public Works  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

Hollywood Fwy design outlined on aerial photo showing route from connection with Santa Ana Fwy. at Spring St.	M/J '49 p21
Pouring first concrete near abutment of Glendale Blvd. grade separation.	J/A '50 p18
Construction on Hollywood Fwy. near Bonnie Brae overcrossing.	J/A '50 p19
Section near Benton Way overcrossing.	J/A '50 p19
Portland cement concrete paving operations at Edgeware Rd. overcrossing.	J/A '50 p20+
Hollywood Fwy. [Cahuenga Fwy.], L.A.	S/O '50 p107
Grand Ave.-Silver Lake Blvd. unit	
Harrison R. Baker (CHC) speaking at dedication	J/F '51 p12
Official cars leading traffic over newly completed Hollywood Fwy. following dedicatory address.	J/F '51 p13
Engineers of the Dept. of Hwys and members of the CHC at luncheon following dedication.	J/F '51 p15
Hollywood Fwy. looking westerly over Alvarado St. interchange structure.	J/F '51 p14
Men who conceived and constructed Hollywood Fwy., group photo.	J/F '51 p15
Construction near Western Ave. overcrossing.	M/J '51 p18
One road-way poured and second in preparation at Vermont Ave. crossing.	M/J '51 p18
Aerial view of construction between Grand Ave. and Alameda St.	M/J '51 p19
Paving machines in operation near Western Ave.	M/J '51 p20
Construction in downtown L.A. near Civic Center.	M/J '51 p21
Aerial view of Hollywood Fwy. between Western Ave. and Virgil Ave.	M/J '51 p22
Engineer Paul Harding speaking at Silver Lake-Western unit dedication.	S/O '51 p17
Official Party at ribbon-cutting ceremony.	S/O '51 p17
Mayor Fletcher Bowron of Los Angeles.	S/O '51 p18
Dedication parade on Silver Lake Ave.-Western Ave. link.	S/O '51 p18
Engineer Paul Harding at dedication of Spring St.-Ventura Fwy. unit.	J/F '52 p13
City Engineer Lloyd Aldrich at dedication.	J/F '52 p13
Official party at ribbon cutting ceremony.	J/F '52 p14
Official caravan of autos using newly opened freeway section.	J/F '52 p14
Downtown L.A. showing freeway construction through civic center.	J/F '52 p15
Aerial view showing split between roadways to accommodate future connections with proposed Santa Monica Fwy.	J/F '52 p16
View from above Figueroa St. looking toward Civic Center, City Hall.	M/A '52 p4
Foundation of building moved to clear right-of-way.	M/A '52 p4
Portion of Hollywood Fwy. through Cahuenga Pass.	M/A '52 p9
Freeway section through L.A. Civic Center showing completed Hill St. Overcrossing, L.A. Board of Education buildings, Federal Building.	M/A '52 p9
Completed section from Alvarado St. into Civic Center.	M/A '53 p12
Completed section of freeway as far as Hollywood Blvd.	M/A '53 p14
Completed section near Cahuenga Blvd. Undercrossing.	S/O '53 p28
Last remaining section to be completed.	S/O '53 p28
Traffic below Four-level grade separation structure.	S/O '53 p34
Completed section from Cahuenga Blvd. to Gower St.	J/F '54 p10
Section through Hollywood business district into San Fernando Valley.	J/F '54 p15
Official ribbon-cutting group for opening at last link of Hollywood Fwy.	M/J '54 p20
Section between Wilton Ave. Br. and Hollywood Blvd. Overcrossing.	S/O '54 p8
Aerial view of Hollywood Fwy. through downtown Los Angeles.	S/O '54 p10
View of freeway looking toward Wilton Ave. Br.	S/O '54 p12
At Hollywood Blvd. on-ramp bridge for in-bound traffic.	S/O '54 p12
View from beneath Hollywood Blvd. off-ramp bridge.	S/O '54 p12
Franklin Ave. near Franklin Ave.-Argyle Ave Undercrossing.	S/O '54 p14
View from Sunset Blvd overcrossing near Van Ness Ave. Overcrossing.	S/O '54 p15

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Los Angeles Co., Continued**

Section showing Hollywood Blvd. off and on-ramps.	S/O '54 p15
View near Highland Ave. off-ramp showing cleared area acquired from Pacific Electric Railway.	S/O '54 p16
Three-level interchange consisting of Ivar St. underpass, Cahuenga Blvd. on-ramp, and Franklin Ave. off-ramp.	S/O '54 p17
Whiteley Heights section.	S/O '54 p19
Section near Rosemont Ave. during right-of-way clearance.	J/A '55 p8
Same location, 1955.	J/A '55 p8
Section noted for its heavy volume of traffic and excellent safety record.	M/A '56 p47
Section at Highway Ave. on-ramp.	J/A '56 p9
Section of approaching Los Angeles Civic Center.	J/F '59 p46
Section of Hollywood Fwy.	M/J '51 p33; N/D '61 p20
Extension of--See Rt. 170	

**US 101; Ventura Fwy.**

Ventura Blvd. (US 101) in vicinity of Valley Blvd.	J/F '48 p12
Completed section looking south from Media Cr. toward Agoura.	J/A '50 p59
Completed section past Calabasas.	J/A '50 p59
Heavy grading operations in progress near Calabasas.	J/A '50 p60
Completed section through Agoura.	J/F '54 p6
Woodland Hills section under construction.	J/F '57 p15; J/F '58 p12
Completed section through Woodland Hills in San Fernando Valley.	J/F '60 p15
Construction at Calabasas near Mulholland Drive Br.	J/F '58 p12
Completed section in San Fernando Valley.	
Median barrier on freeway near Louise Ave. and home of Edward E. Horton.	J/F '60 p5
Gov. Edmund G. Brown at Ventura Fwy. dedication.	M/J '60 p2
Completed section between Encino Ave. and Kelvin Ave.	M/J '60 p2
Construction near Laurel Canyon Blvd.	M/J '60 p7
Ventura Fwy. between Sepulveda Blvd. and Laurel Canyon Blvd.	M/J '60 p7
Aerial view of freeway showing hairpin turn on Sepulveda Blvd., and Mulholland Drive Br.	M/J '60 p8
San Fernando Valley section.	J/F '59 p48; N/D '60 p43; M/A '61 i.cvr.
Ventura Fwy. in Burbank passing Forest Lawn, Walt Disney Studios, Providence High School, and St. Joseph's Hospital.	M/J '65 p32
Wilshire Blvd. in Los Angeles, 1910.	S/O '50 p95
Venice; old "speedway" shows expensive problems in road modernization.	F '38 p13

**Madera Co.**

**Rt. 41 [Rt. 125]**

Section of road in need of reconstruction on south entrance to Yosemite Park.	F '38 p15
Section of new direct 10 mile highway link into Yosemite.	D '39 p14
Realigned section south approach to Yosemite.	D '39 p15
Cut that required removal of 125,000 cu. yards of rock; construction scene.	D '39 p15

**Rt. 99 [US 99]**

<b>Chowchilla Bypass</b> near junction with Rt. 152.	S/O '58 p37
North end connection under construction.	M/A '57 p62
Overcrossing and ramps, which will connect Rt. 99 to Chowchilla.	M/A '57 p62
Future northbound lane under construction near Califa underpass.	M/A '57 p63
Section crossing Berenda Slough.	M/A '57 p63
<b>Madera Bypass.</b>	S/O '58 p35; J/F '59 p49
Landscaped section near 4th St.	J/F '60 p60
Low-lying species of pyracantha planted on slopes of bypass.	J/F '60 p61
Madera Bypass showing turn-off for local traffic.	J/F '60 p61
Shoulder construction on Rt. 99 resurfacing project.	S/O '59 p9

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Madera Co., Continued**

Rt. 145 [Rt. 126]

Dirt being moved by wagon trains filled by hand labor and hauled by tractor to comply with WPA regulations.

Jun '41 p4

Stretch of new highway; road before reconstruction.

Jun '41 p5

**Marin Co.**

Marin access road to Dry Dock Training Center and Naval Net Depot on Tiburon Peninsula.

N/D '44 p3

Nicassio Rd. relocation, an FAS project.

J/A '61 p50+

Point Reyes Station-Novato Road, rock cut on.

M/A '49 p14

Rt. 17; 4-lane freeway approach to Richmond-San Rafael Br.

N/D '57 p29

Rt. 37: Black Point Cut-off, general views.

J/A '50 p41

Expressway construction on Black Pt. Cut-off near Atherton Ave.

M/A '59 p16

Modernized section of Black Point Cut-off near new Petaluma Creek Br.

J/F '60 p37

Rt. 37 at Atherton Ave. interchange, Black Point.

M/A '60 p17

Rt. 131 (Tiburon Blvd.) after improvement.

M/J '64 p33

Sir Francis Drake Blvd. [FAS Rt. 608], after realignment.

N/D '58 p31+

Sir Francis Drake Blvd., an example of a highway that is both aesthetically pleasing and functional.

M/A '64 p63

**US 101, Redwood Hwy.**

Four-lane approach highway on new alignment to connect with north end of San Rafael Viaduct.

D '40 p10

Frontage road 1/4 mile north of Forbes overhead.

J/A '52 p33

Greenbrae construction underway showing new off-ramp bridge connection to San Quentin.

M/J '61 p3

Hamilton Field AFB section near Novato, widened to six lanes.

M/J '65 p32

Channelized area at entrance to Hamilton Field.

S/O '45 p23+

Ignacio-Petaluma route

Tractor and carryall combination excavating cut.

J/A '46 p14

Woolbridge Terra-Cobra scrapers excavating cut.

J/A '46 p15

Link belt power shovel and trucks excavating rocky material from cut.

J/A '46 p15

**San Rafael**

Improving Redwood Hwy. near San Rafael, 1916.

J/A '64 p24

Puerto Suello Pass section.

May '38 p2+

Realignment through San Rafael near Grand Ave.

D '38 p11

Realignment looking from Puerto Suello cut south toward San Rafael.

D '38 p13

Section of new divided highway north of San Rafael.

Jul '41 p21

Redwood Hwy. looking north toward San Rafael.

M/A '54 p10

Section near San Rafael.

M/J '61 p3

Scenic section of US 101.

M/A '59 p1

Section north of Golden Gate Br.

M/A '59 p7

US 101 as seen from Richmond-San Rafael Br. looking toward Alto.

M/A '57 p17

**Waldo (Marin) Approach to Golden Gate Br. [Golden Gate Bridge Fwy.]**

Heavy grading work on Marin approach.

Jan '37 p3

Constructing highway approach at north abutment of bridge.

Jan '37 p3

Placing of steel and form work at south portal of tunnel through hills.

Jan '37 p3

Ventilation precautions in wall drift.

Jan '37 p3

Waldo Approach looking downgrade toward Richardson's Bay, and junction of new road with state highway at Waldo Point.

May '37 p5

Putting finishing touches on section of new highway leading to bridge.

May '37 p5

Waldo approach showing one of deep cuts.

Jun '37 p3

Taken from Waldo tunnel mouth looking south towards bridge.

Jun '37 p3

Another stretch of highway leading to Marin side of bridge.

Jun '37 p3

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Marin Co., Continued**

Parade of autos arriving at S.F. toll plaza after dedication ceremony.	Jun '37 p3
Section of crowd gathered to witness dedication of Waldo Approach.	Jun '37 p16
Gov. Merriam delivers dedication speech over nationwide radio hookup.	Jun '37 p12
Sketch on photograph shows proposed Waldo Approach lighting system.	D '37 p14
Projected lighting system to protect traffic emerging from southern portal of Waldo Tunnel.	D '37 p15
Lighting system for Marin approach to Golden Gate Br.	D '37 p15
42 ft. plant mix surface on approach to Golden Gate Br.	May '38 p15
Channelized "Y" type intersection of Waldo approach.	O '38 p10+; Mar '40 p20
Construction operations on Waldo Grade widening project.	M/A '54 p9
Waldo Approach at Sausalito Interchange.	M/A '56 p17
Section approaching tunnel entrance near Spence Ave. showing extensive viaduct construction.	M/A '56 p17
Aerial view of freeway as it emerges from north portal of twin tunnels.	M/A '56 p20
Army tank crashing through barrier signaling freeway opening.	M/A '56 p20
Southerly terminus of proposed widening project.	J/A '53 p10
W. Sandelin (CHC) at ground-breaking for Waldo Approach widening.	S/O '53 p14
Official party on deck of ground-breaking bulldozer.	S/O '53 p15
Bulldozer breaking ground.	S/O '53 p15
Mrs. Ann Jackson of San Rafael, Junior Engineer in office of Assistant State Highway Engineer B.W. Booker, poses with Earl Withcombe and George T. McCoy.	S/O '53 p16
Excavation operations on Waldo Grade approach widening.	M/J '54 p56
Construction operations on Waldo Grade approach widening.	M/A '55 p13
Aerial view of Waldo approach looking toward San Francisco.	S/O '55 p60

**Mariposa Co.**

One-way road west of Coulterville.	Mar '39 p10
Rt. 49 improvement near Mariposa before beginning of surfacing.	M/J '54 p45
Typical alignment on new construction.	M/J '54 p46

**Rt. 120; Tioga Pass Rd.**

Eastern approach to Yosemite National Park via Tioga Pass, 1941.	J/A '60 p54
Tioga Pass Hwy. between Ellery and Tioga Lake cleared of snow and opened.	J/A '44 p3
Yosemite National Park looking east on old road, 1947.	N/D '50 p3
New road, 1950, after two winters.	N/D '50 p3+
Entering Yosemite National Park from east via Tioga Pass.	M/J '66 p27

**Lee Vining Canyon section**

Survey crewman working on rock face during staking for realignment.	J/F '66 p7
Drills in operation during reconstruction.	J/F '66 p8
Blasting new right-of-way in Lee Vining Canyon near Elephant Head.	J/F '66 p9
Dump trucks used to shield office trailers during blasts.	J/F '66 p10
Baled hay being spread on old sidehill viaduct as protection from blast.	J/F '66 p10
Preliminary work on supports for new sidehill viaduct.	J/F '66 p10
Traffic moving along Tioga Pass Rd. before improvements.	J/F '66 p12
Widened route near Dodge Point awaiting final asphalt surfacing.	J/F '66 p12
Bulldozer clearing blast debris from right of way in Tioga Pass.	J/F '66 p12
Dodge Point section and sidehill viaduct before improvement.	J/F '66 p12
Tioga Pass Rd. at Dodge Point before widening.	J/F '66 p13
Mono Craters and White Mountain as seen from Lee Vining Canyon.	J/F '66 p15
Tioga Tarns.	J/F '66 p16+
North side of Tioga Pass with tarn in foreground.	J/F '66 p19

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Mariposa Co., Continued**

Rt. 140 [Rt. 18, Yosemite All-Year Hwy.]

Realigned sections through Mariposa.

Aug '41 p4+

Briceburg Grade; Typical cut slope on Briceburg Grade.

M/J '54 p43

Power shovel at work on Briceburg Grade.

M/J '54 p43

Improvement near Mariposa; Drilling for blasting realigned portion.

M/J '54 p44

Portion of existing road to be widened and resurfaced.

M/J '54 p44

Construction under way north of Mariposa.

J/A '58 p19

Improved and flood-repaired section through Merced Canyon.

J/F '60 p37

**Mendocino Co.**

Rt. 1; Westport-Leggett Valley reconstruction near Juan Creek Bluffs.

M/J '58 p35

Giant cuts made in Juan Cr. bluffs as part of reconstruction job.

M/J '58 p36

**Rt. 20; Russian River Reservoir relocation**

Rugged sidehills being traversed by relocation in canyon of

East Branch of Russian River.

M/J '57 p1

Westerly end of Russian River relocation project at Calpella.

M/J '57 p3

Rugged canyon of East Branch of Russian River.

M/J '57 p3

Easterly end of Russian River Reservoir relocation project.

M/J '57 p3

Rt. 20 at the Mendocino-Lake Co. line.

M/J '57 p4

Near beginning of improvement looking west.

M/J '57 p4

Heavy sidehill construction in canyon of the E. Branch of Russian Rvr.

J/A '58 p42

Rt. 128 [Rt. 28]

Flynn Creek-Navarro section winding through heavy growths of redwoods.

Aug '42 p16

Redwoods in path of new highway realignment.

Aug '42 p17

Logs being cut to commercial lengths.

Aug '42 p17

Boonville; realignment under construction southeast of Boonville.

N/D '52 p54

Rt. 253; pioneer fence still marks right-of-way.

Section of completed roadway, built in cut rather than fill due to unstable soil conditions.

J/A '66 p27

Realigned section, old pioneer toll road visible at right.

J/A '66 p27

**US 101 (Redwood Hwy.)**

"Kennedy's Survey Party" in camp near Leggett, 1913.

J/A '64 p26

Laytonville realignment, grading work in progress.

O '37 p15

Before/after views of alignment.

O '37 p15

2 views of old highway showing two of 59 curves on route.

O '37 p15

Hopland section after improvement.

N/D '43 p16+

Before/after views of improved section.

N/D '43 p17

Outlet Creek-Reeves Creek section showing crooked alignment of old road.

May '37 p7

Outlet Creek-Reeves Creek showing new alignment.

May '37 p7

Rattlesnake Summit area, reconstruction over slide, late 1920s.

J/A '64 p32

**Red Mt. Creek-Piercy unit**

Roadway approaching Red Mt. Creek Br.

N/D '48 p44

Approaching McCoy Cr. crossing.

N/D '48 p44

Wide roadway which replaced narrow road through unstable area.

N/D '48 p45

Roadway along Eel Rvr.

N/D '48 p45

Ridgewood grade project, heavy construction on.

N/D '53 p9

Bench cut on Ridgewood grade project.

N/D '53 p10

Crowd on highway at dedication ceremony.

N/D '54 p35

Official party at dedication luncheon.

N/D '54 p35

Expressway crossing Ridgewood Summit.

S/O '64 p19

Section skirting Frank and Bessie Smith [redwood] Grove (formerly Lane's

Redwood Flat) just south of Mendocino-Humboldt Co. line.

S/O '64 p16

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Mendocino Co., Continued**

<b>Willits</b>	
Ridgewood Summit road near Willits in 1938, typical of old "reverse curve" construction.	J/A '64 p33
Section north of Willits in Long Valley Cr. Canyon.	N/D '59 p37
Highway through Main Street, Willits.	S/O '64 p17
Redwood Hwy. south of Willits, early 1900s.	M/J '64 p10
Devil's Knee on old highway, 1911.	M/J '64 p10
Ukiah; freeway section just north of Ukiah.	S/O '64 p19
Ukiah Bypass looking north toward Calpella.	M/A '66 p47
Ukiah Bypass showing "trumpet type" interchange with Rt.. 20.	M/A '66 p47
<b>Merced Co.</b>	
Bellevue Rd. improved at Livingston Canal crossing.	M/A '64 p53
Bellevue Rd at intersection with Buhach Rd.	M/A '64 p55
<b>I-5 [Westside Fwy.]</b>	
Nearly completed section northwest of Los Banos.	M/A '66 p39
Sen. James A. Cobey of Merced and Dist. 10 Engineer John Meyer ride Mexican carrreta pulled by members of Rt. 33 Assoc. to celebrate of opening of I-5 unit.	J/A '66 p16
Los Banos; Medical Center parking; Off-street parking at restaurant.	J/F '56 p46
"No Parking" signs on Pacheco Blvd.; City owned parking lot.	J/F '56 p47
Los Banos-Turlock Rd. [FAS 914] showing bridge across San Joaquin Rvr.	M/J '61 p43
Los Banos-Turlock Rd. showing Santa Fe Canal crossing.	M/J '61 p44
Rt. 33 improvement south of Gustine showing new alignment.	M/J '54 p47
<b>Rt. 99 [US 99]</b>	
Livingston, near south city limits.	M/A '49p25
Improvements looking southeasterly from Livingston.	M/A '49 p26
Atwater Bypass.	J/F '58 p46; J/A '59 p3
Merced Bypass under construction.	N/D '61 p15; J/A '64 p46
Rt. 99 freeway at Rt. 140 (V St.) interchange.	J/A '64 p44
Completed freeway.	J/A '64 p46
Buhach; Divided 4-lane highway section showing county road intersection channelization with raised bar island and cross-over between traffic lanes.	N/D '47 p22
Rt. 140, Gustine-Merced Hwy., near Gurr Rd.	M/J '54 p48+
Merced Canyon on route to Yosemite Valley.	M/J '50 p43
<b>Rt. 152 (Pacheco Pass Hwy.)</b>	
Truck parking area at summit.	J/A '65 p2
Section crossing San Luis Reservoir showing "Cottonwood Fill."	J/A '65 p3
Compaction test being performed at night.	J/A '65 p4
Drilling operations in progress.	J/A '65 p4
"Big Cut" and "Big Fill."	J/A '65 p6
"Big Fill" at rough grade level.	J/A '65 p7
Santa Fe Dr. in Merced, divided and improved section.	J/A '66 p44
Santa Fe Dr before improvement.	J/A '66 p44
<b>Modoc Co.</b>	
Rt. 139-299; Susanville-Altura Rd. before improvement; After improvement.	M/J '56 p36
<b>Rt. 299 [Rt. 28; Rt. 3, Pacific Hwy.]</b>	
Adin Summit on US 299.	M/A '58 p6
Adin-Alturas expressway after completion.	S/O '64 p11
Expressway on Rt. 299 northeast of Adin.	N/D '64 p9
Alturas-Cedarville Rd. under construction, 1906.	M/A '51 p39
Hand excavation through lava rock formation on Alturas-Cedarville Rd.	S/O '50 p93



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Modoc Co., Continued**

Bonner Grade realignment	
Bulldozer working on rugged terrain.	M/A '51 p40
Heavy grading near Division of Hwys. maintenance station.	M/A '51 p40
Near summit of Bonner Grade after grading operations	M/A '51 p41
Same section under construction, 1906	M/A '51 p39
Aerial view of completed Bonner Grade project.	M/A '51 p41
Cedar Pass west approach between Alturas and Cedarville.	M/A '58 p6
Hot Creek-Alturas unit after improvement.	Mar '38 p13
Entering Alturas on new highway.	Mar '38 p13
Rush Creek before reconstruction, winter view.	S/O '64 p12+
Surprise Valley Rd. near Cedarville [FAS project.].	M/J '47 p23+
US 395 east of Alturas at junction with Rt. 299 [Rt. 28] to Cedarville.	M/A '58 p12
<b>Mono Co.</b>	
Bridgeport Wagon Rd.	
Section of cleared line for Bridgeport Wagon Rd. survey.	S/O '53 p17
East Walker River; Beaver dams flood survey line.	S/O '53 p18
Beginning of survey; section of existing pioneer road.	S/O '53 p19
Minarets Summit Rd. FAS project after surfacing.	J/F '55 p41
Section of Old Minarets Rd before reconstruction.	J/F '55 p41
Earthquake fault crossed by Minarets Summit Rd.	J/F '55 p42
Parking area near Mammoth Lake on Minarets Summit Rd.	J/F '55 p42
Pole Line Rd., Gov. Charles H. Russell of Nevada cuts ribbon at dedication.	N/D '57 p21
Section of improved Pole Line Rd. near Nevada State Line.	S/O '58 p10
Rt. 89; Ebbetts Pass Hwy. (Alpine Co.)-US 395 junction unit	
Wanda Durkee (Mrs. Frank B.) snips ceremonial ribbon.	S/O '54 p23
Scene at dedication; Mono Co. Supervisor Gene Crosby. dedication.	S/O '54 p23
Section of new road.	S/O '54 p24
<b>Rt. 120 [Rt. 40, Tioga Pass Hwy.]</b>	
Benton Rd., near Mono Mills.	Jan '39 p6
Narrow, crooked road through June Lake Village.	Jan '39 p6
Section looking toward Camp Tioga before/after improvement.	Jul '41 p4
Vista of Tioga Lake.	Jul '41 p5
Looking easterly from Yosemite Park checking station.	Jul '41 p5
Entrance to Yosemite Valley.	Jul '41 p5
Section at Lee Vining Creek Br. before/after improvement.	Jul '41 p6
Section of Tioga Pass Hwy. before/after realignment.	Jul '41 p7
Bulldozer in operation clearing Rt. 120 (Tioga Pass Rd.).	N/D '64 p16
Rt. 168 looking east into Deep Springs Valley.	J/A '66 p35
Rt. 203; Mammoth Lakes Hwy.	
Attractive view looking across Lake Mary from new highway.	D '37 p6
View of Twin Lakes, with new highway in distance.	D '37 p6
Where highway crosses ornamental bridge structure.	D '37 p7
Scenic stretch of new highway showing heavy timber growth.	D '37 p7
Rt. 266 where route drops down into Owens Valley.	J/A '66 p34
Large sign marking turn-off to Bristlecone Pine Forest.	J/A '66 p34
Section at Nevada state line.	J/A '66 p35
Section approaching Inyo Co. line.	J/A '66 p35
View from Gilbert Pass.	J/A '66 p35
Sign at Westgard Pass dating back to 1916.	J/A '66 p35
Sweetwater Rd. FAS realignment around pond on East Walker River.	M/A '55 p41
Section of old alignment.	M/A '55 p41
Channel change on East Walker River.	M/A '55 p40

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Mono Co., Continued**

**US 395 [Leg. Rt. 23, Sierra Hwy.]**

Convict Lake as seen from US 395.	J/A '52 p40+
Lake Mary in Mono Co., reached by US 395.	J/A '52 p40
<b>Mono Lake-Conway Summit section</b>	
New alignment along shore of Mono Lake.	Apr '37 p19
View from Conway Grade looking over Mono Lake near Mono craters.	Apr '37 p19
Section near Mono Lake being relocated and improved.	S/O '58 p7
Section along shoreline of Mono Lake, Conway Grade in distance.	S/O '58 p9
Carving a new route for US 395 over Conway Summit.	N/D '61 p69
High Sierra, Mono Valley, and Mono Lake as seen from Conway Summit.	J/F '66 p18

**Sherwin Grade**

Looking into Long Valley from Sherwin Grade, north of Bishop.	Apr '37 p19
Switchback alignment up Sherwin Hill south of summit.	Aug '37 p11
Curves which will be eliminated from Sherwin Hill route.	Aug '37 p11
Looking south from Sherwin Hill into Round Valley.	Aug '37 p11
Curves being realigned out of Sherwin Grade.	Aug '37 p11
Section of Sherwin grade north of summit before improvement.	N/D '55 p14
Aerial view of Sherwin grade showing proposed relocation.	N/D '55 p15
Proposed relocation in Upper East Mesa area.	N/D '55 p15
Proposed relocation in Whiskey Canyon area.	N/D '55 p16
Proposed relocation in Bircham Canyon area.	N/D '55 p16

**Monterey Co.**

Access road between King City and Camp Hunter Liggett.	J/A '45 p23
Los Laureles Grade Rd. [FAS 660] after reconstruction.	M/A '61 p69
Los Laureles Grade Rd. in 1956; Same section after reconstruction.	M/A '61 p70+

**Rt. 1 [Rt. 56]**

Carmel-San Simeon Hwy. dedication.	Jul '37 p1+
Portion of auto caravan at Carmel-San Simeon dedication.	Jul '37 p3
Section of new highway.	Jul '37 p3
Gov. Merriam and Earl Lee Kelly operate bulldozer to remove last boulder barricade from new highway.	Jul '37 C
Completed San Simeon-Carmel Hwy.	M/J '50 p45
Guard rail installation on Monterey Coast Hwy.	N '40 p13
Monterey-Castroville access project near Ft. Ord.	J/A '45 p23
Rt. 198; Mustang Ridge, improved section of.	O '41 p5
Procession of cars at dedication ceremony for realigned Mustang Ridge unit.	O '41 p4

**Rt. 156**

**Prunedale Cut-off**

Unfinished section of Castroville-Prunedale road.	F '43 p18
Realigned and regraded sections of cut-off.	F '43 p19
Transitions on divided highway where old pavement changes from right to left set of lanes.	J/A '47 p24
Erosion protection on embankment slope.	J/A '47 p25
4-lane divided highway developed from existing 2-lane highway.	J/A '47 p25
Marina-Castroville section, completed.	S/O '44 p10+
Seaside Junction-North Fort Ord boundary project, completed.	S/O '44 p10+

**US 101**

Bradley; tractor and yard scraper at work on realignment.	D '39 p9
Bradley-San Ardo Fwy.	N/D '64 p11; M/J '65 p8
Bradley-San Ardo freeway near San Bernadino overcrossing.	M/J '65 p6+
Looking eastward along Jolon Rd. toward new freeway.	M/J '65 p7
Old highway under construction, 1933.	M/J '65 p8

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Monterey Co., Continued**

Chualar section, general views.	J/A '54 p2;	N/D '61 p20
Depressed freeway section through Chualar.	J/A '58 p26	
Chualar-Spence Underpass unit, construction on.	J/F '52 p53	
Applying water to base material by means of power sprays.	J/F '52 p54	
Completed section between Chualar and Spence Underpass.	J/F '52 p54	
Crazy Horse Summit 4-lane divided highway.	J/A '47 p1	
Dirt road in Monterey replaced with new paved alignment, shown at left.	Jul '39 p22	
Greenfield Bypass on US 101.	N/D '61 p7	
Greenfield-King City expressway.	S/O '58 p18	
Salinas, showing widening of division strip at county road intersection.	J/F '47 p30	
Curved division strip with acceleration lane.	J/F '47 p31	
Division strip on transmission from 2-lane to 4-lane divided highway.	J/F '47 p32	
Salinas Fwy. section near Alisal.	M/A '54 p37	
Aerial photo indicating proposed Salinas Fwy. location.	N/D '51 p28	
Completed portion of Salinas Fwy.	J/A '54 p3	
Salinas Bypass near interchange with Rt. 17.	J/A '58 p25	
Salinas Bypass as seen from John St. overcrossing.	J/A '58 p29	
Santa Rita-Crazy Horse Summit unit widening, existing 2-lane roadbed.	J/A '46 p6	
Mississippi wagon used to haul excavation materials.	J/A '46 p7	
View of embankment construction activities.	J/A '46 p7	
Scraper used on embankment material.	J/A '46 p32	
Section of 4-lane divided highway developed from existing 2-lane highway.	S/O '50 p143	
Soledad Bypass; traffic through Soledad before bypass.	M/A '61 p54	
Soledad-Greenfield expressway near Arroyo Seco Overhead.	J/A '58 p28	
Old highway through Soledad.	J/A '58 p28	
Entrance to Soledad State Prison before widening.	J/A '58 p30	
Detour at beginning of project between King City and Greenfield.	J/A '58 p32	
<b>Napa Co.</b>		
I-80 [US 40], American Canyon Cut-off, adding additional lanes to.	D '41 p11	
Vallejo-Napa Hwy. access road		
Napa Wye-Vallejo 4-lane highway before paving operations.	S/O '44 p8	
Paving operations between Napa Wye and Napa City.	S/O '44 p9	
Carryalls grading on Vallejo-Napa highway.	S/O '44 p23	
Rt. 29; widened section north of Napa between Union Station and Orchard Ave.	M/A '58 p19	
Yountville Bypass on Rt. 29 near California Dam Interchange.	M/A '60 p17	
<b>Nevada Co.</b>		
I-80 [US 40]		
Construction east of Kingvale.	J/A '59 p23	
<b>Donner Summit--See also SNOW</b>		
Granite heaps between Emigrant Gap and Donner Summit over		
which pioneer state highway engineers constructed a route.	S/O '50 p67	
I-80 [US 40] in same location ca 1950.	S/O '50 p67	
Newly paved section bordering Donner Lake.	O '37 p1+	
View of section of new Donner Summit highway.	O '37 p3	
Rock cut to be widened at Donner Summit.	J/A '48 p2	
Relocating old road to provide interstate route over Donner Summit.	N/D '61 p19	
I-80 freeway superseding old US 40 at Donner Summit.	N/D '64 C	
Old US 40 route at Donner Summit and new I-80 freeway.	J/F '65 p42	
Old Donner road ca. 1923-24.	J/F '65 p43	
Emigrant Gap on new I-80 freeway.	J/F '65 p44	
New summit area of I-80 in vicinity of West Lakes.	J/F '65 p44	
I-80 near Cisco Grove showing unusual median.	J/F '65 p45	

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Nevada Co., Continued**

Section near Soda Springs.	J/F '65 p45
Freeway roadways as seen from Yuba Gap.	J/F '65 p46
Eastbound road and frontage road near Donner Summit cleared of snow.	J/F '65 p46
Traffic congestion during snow conditions on old highway [US 40].	J/F '65 p47
Graders removing snow at old Donner Grade after big storm of 1952.	J/F '65 p47
I-80 freeway over Donner Pass.	N/D '65 p5
Aerial view of I-80 showing entire Donner Pass country.	M/A '66 p8
Split-level design, winner of Governor's Design Award.	N/D '66 p23; J/F '67 p37
I-80 near Donner Summit ca. 1950s, before freeway renovation.	J/F '67 p17
Same area, ca. 1964, after freeway conversion.	J/F '67 p17
Floriston-Nevada state line route before widening.	S/O '56 p40
Paving operation Floriston-Nevada state line.	J/A '58 p4
Fly-casters curve [near Truckee], before widening.	J/A '48 p3
Section to be widened, looking east near Donner Summit near Donner Br.	J/A '48 p2
New and old routes of state highway east of Emigrant Gap.	S/O '50 p67
<b>Truckee River Canyon section under construction.</b>	M/J '57 p20
Truckee River Canyon, indicating relocated route of US 40.	M/J '57 p21
Cover page on folder distributed to motorists using route.	M/J '57 p22
Traffic passing through construction area between Truckee and Nevada.	N/D '57 p15
Aerial view of construction.	N/D '57 p16
Completed section in Truckee Canyon west of CA-NV state line.	N/D '59 p1
Section near Boca Br. and Overhead.	N/D '59 p2
Hampton Rocks-Soda Springs unit just before completion.	N/D '59 p4
Western outskirts of Truckee and I-80/Rt. 89 intersection.	N/D '59 p5
2-lane road over summit provided with passing lanes on up-grades.	N/D '59 p6
Working on asphalt shoulder on	
Hampshire Rocks-Soda Springs section, working on asphalt shoulder.	N/D '59 p28
Setting guard railing on Boca Br. approach.	N/D '59 p28
Self-propelled scrapers and bulldozers cutting stabilized trenches.	N/D '59 p28
Concrete saw cutting joints in new pavement near Soda Springs.	N/D '59 p28
Truck-mounted profilograph checking smoothness of paving.	N/D '59 p29
Placing freeway signs on Truckee Canyon section.	N/D '59 p29
<b>Rt. 49 [Rt. 25] (Mother Lode Hwy.)</b>	
Auburn-Grass Valley section.	O '40 p20+; M/J '49 p50
Grass Valley, Main St. before and after reconstruction.	J/A '60 p48
<b>Nevada City-Downieville route</b>	
"Road of a Thousand Curves" in need of improvement.	Aug '38 p1
Heavy rock excavation in progress on realigned section.	M/J '46 p2
Section of new highway between Nevada City and Downieville.	M/J '46 p3
Rt. 89 at channelized intersection for Squaw Valley turn-off.	N/D '59 p5
Rt.. 267; sign on I-80 near Truckee indicating Rt. 267 turn-off.	M/A '66 p43
<b>Orange Co.</b>	
Brookhurst-Wright St. [FAS Rt. 747]	
Looking southerly along Wright Ave. toward intersection of Bolsa Ave.	M/J '52 p38
Looking north along Brookhurst St.	M/J '52 p39
Garden Grove Blvd. (Garden Grove), improved section.	
Harbor Blvd. (Garden Grove) looking north to 800-ft. radius curve.	N/D '47 p9
Harbor Blvd. near intersection of Garden Grove Blvd.	N/D '47 p35
Harbor Blvd. looking north to Bolsa Ave.	N/D '47 p35
Harbor Blvd. between Santa Ana and Costa Mesa.	S/O '60 p19
Harbor Blvd reconstruction near intersection with Garden Grove Blvd.	S/O '64 p47+
Harbor Blvd before/ after improvement.	S/O '64 p48

# **ROUTES Orange Co., Continued**

Houston St. (Placentia) [Rt. 14; Houston Expressway]	
Cypress Ave.-Santa Ana Cyn. Rd. unit, ribbon-cutting ceremony.	J/A '56 p56
<b>I-5; Santa Ana Fwy.-See also ROADSIDE BUSINESS &amp; BYPASSES</b>	
San Clemente unit.	
Streamliner train negotiating long curve on relocated route.	F '42 p8
Stretch of relocated track and US 101; Portion of old and new highway.	F '42 p9
Asphalt concrete resurfacing of highway near San Clemente.	M/J '45 p13
Construction work east of Euclid Ave. grade separation.	S/O '48 p42
Construction through Buena Park.	N/D '50 p20
Construction underway near county line.	N/D '50 p21
Construction in Santa Ana near 17th St. undercrossing.	J/F '52 p21; N/D '52 p17
Construction in progress on overhead bridge from Main St., Santa Ana.	N/D '52 p17
Section near Washington Blvd. Undercrossing.	N/D '52 p17
Construction at L.A. Ave. intersection at Miraflores (Anaheim-Santa Ana).	N/D '52 p17
Construction progress at crossing with Lakewood Blvd.	N/D '52 p21
Section bypassing main business and residential areas of Santa Ana.	J/F '55 p19
Tustin Ave. to 1st St. section.	J/A '55 p53
Construction on Browning Ave-1st St. (Tustin) section.	J/A '55 p51+
Construction near Chapman Ave Traffic Interchange System, drive-in theater, and Orange Co. Hospital.	S/O '55 p13
Completed section through Tustin at interchange with Tustin Ave.	J/F '57 p7
Construction underway through Anaheim at Lincoln Ave.	J/F '57 p8
Construction in Buena Park at Grand Ave.	J/F '57 p15
Construction in Buena Park at crossing of Artesia Ave.	J/F '57 p15
Harbor Blvd. at Disneyland and interchange with Santa Ana Fwy.	J/F '57 p16
Construction between Broadway and Lewis St. near Orange Co. Gen. Hospital.	J/F '57 p16
Section looking south from Laguna Canyon Rd. (Rt. 55)	J/A '58 p24
Construction between Anaheim and Buena Park.	J/F '58 p48
Construction through Anaheim near Broadway-Anaheim shopping center.	J/F '58 p49
Completed section approaching Laguna Canyon Rd. separation bridge.	S/O '58 p13+
View southeast from Jeffrey Rd. looking toward Irvine.	S/O '58 p15
Culver Rd. section and undercrossing.	S/O '58 p15
Signing on new section of freeway.	S/O '58 p16
<b>I-405; San Diego Fwy.</b>	
Old US 101 and proposed route of San Diego Fwy. through San Clemente.	J/F '57 p12
San Diego Fwy. overcrossing in San Juan Capistrano.	J/F '58 p49
Completed section through San Clemente.	N/D '58 p41+
Section near San Juan Capistrano Mission at interchange with Ortega Hwy.	J/F '59 p35
Construction underway between San Mateo Cr. and Niguel Rd.	J/F '59 p36
Completed section near Niguel Rd.-El Toro Rd. interchange.	J/F '60 p17
Interconnecting roadway between US 101 and San Diego Fwy. near Capistrano Beach.	J/F '60 p18
Construction skirting town of San Clemente.	J/F '60 p65
Construction between San Clemente and Capistrano near Camino de Estrella overcrossing.	S/O '60 p46
Completed section in San Clemente.	M/A '61 p15
Dedication ceremony for Los Angeles-Orange Co. unit of San Diego Fwy.	M/J '65 p33
Lincoln Ave. after widening (Anaheim).	J/F '60 p10
<b>Manchester-Firestone Boulevard [Rt. 42; Leg. Rt. 174]</b>	
Officials guests at opening of Anaheim link.	May '37 p19
New link of Manchester Blvd. south of Anaheim.	May '37 p19
Nicolas Ave. extension between Fullerton and LaHabra under construction.	S/O '60 p19

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Orange Co., Continued**

Rt. 22; Garden Grove Fwy.	
Section under construction near Knott, and Newland St.	M/A '64 p28
Depositing load of central mix concrete, Harbor Blvd.-Haster St. unit.	M/A '65 p48
Section through Garden Grove.	J/A '66 p22+
Rt. 39 [Rt. 171]	
4-lane divided highway through Buena Park.	Jan '43 p16
Curbed, triangular traffic island on new route.	Jan '43 p17
View of 4-lane section through orange orchards.	Jan '43 p17
Rt. 55; Newport Fwy. [Leg. Rt. 43; Santa Ana Canyon Fwy.]	
Costa Mesa limited access freeway.	N/D '53 p44+
Newport Fwy. at junction with Yorba Blvd.	J/F '54 p5
Rt. 73 [Rt. 184; Corona Del Mar Fwy.]	
Santa Ana-Corona del Mar link under construction.	Jun '41 p23
Graded route at Corona del Mar end; Junction point with Rt. 1.	Jun '41 p23
Rt. 90 [176; Rt. 43]; Imperial Hwy.	
Section looking east from Sepulveda Blvd. near L.A. Municipal Airport.	J/F '45 p3
Improved Imperial Hwy. looking east from Isis Ave.	J/F '45 p4
Yorba Linda Fwy. between Orangethorpe Ave. and Yorba Linda.	M/A '64 p29
Rt. 91; Artesia-Riverside Fwy. [Houston Fwy., Rt. 175 Fwy.]	
Southerly on Rt. 43 at temporary connection for detour to frontage road.	J/A '55 p54
Completed freeway at Santa Ana Rvr. bridges, showing connection to Newport Fwy (Rt. 55)	J/F '57 p5
View eastward toward interchange with Brookhurst Ave.	J/F '59 p42
Miss Orange Co. cuts ribbon dedicating Artesia-Riverside Fwy.	J/F '67 p10
Rt. 133; Laguna Canyon Rd. [Laguna Blvd., Rt. 185]	
Completed construction in Laguna Canyon near Laguna Beach.	S/O '52 p6
Section near Canyon Acres Dr. showing newly planted cuttings for center divide strip.	S/O '52 p7
Constructing storm drain at north city limits of Laguna Beach.	S/O '52 p12
Improved section of.	J/A '58 p23
Santa Ana Canyon Rd. [Rt. 18], completed section.	J/A '52 p36+
<b>Placer Co.</b>	
<b>I-80 [US 40]</b>	
<b>Auburn section--See also ROADSIDE BUSINESSES &amp; BYPASSES</b>	
Looking northeast from beginning of relocation through city.	N/D '46 p8
Grading equipment constructing fill near SP Overhead.	N/D '46 p9
Looking west across Walsh St. undercrossing during construction.	N/D '46 p9
Aerial view of realigned section through Auburn.	S/O '50 p99
Realignment near Auburn.	N/D '57 p17
Completed freeway section west of Auburn.	J/F '59 p50
Section of expressway in vicinity of Auburn.	N/D '59 p6
Applegate-Auburn relocation, grading operations, existing highway on left.	J/A '49 p50
Looking east on new 4-lane divided alignment.	M/A '51 p58
Baxter; batch plant in operation.	N/D '59 p4
Interstate freeway construction near Baxter.	N/D '61 i.cvr.
Baxter-Emigrant Gap realignment near Airport Hill.	J/A '59 p25
Colfax; widening construction underway.	J/A '57 p32
Improved section east of Colfax.	J/F '60 p29
Expressway through Sierra Nevada foothills east of Auburn.	N/D '53 p38
"First Division of Highways Shed" on I-80 [US 40], in Baxter.	S/O '56 p41
Magra Overhead, construction near underway.	J/A '59 p23
Completed section looking east toward Magra Overhead.	N/D '59 p4

# **ROUTES Placer Co., Continued**

Monte Vista; reconstructed county road at providing detour around I-80 [US 40] construction in this area.	N/D '59 p6
Monte Vista-Baxter unit; equipment drying out subgrade on new right-of-way.	N/D '59 p29
Newcastle; looking easterly from Wise Powerhouse.	S/O '56 p41
Beginning of project, east of Newcastle.	
Newcastle-Auburn unit construction underway.	N/D '57 p17
Roseville-Newcastle, completed section between.	N/D '59 p4
Weimar-Gold Run construction.	N/D '57 p16
Cut and fill construction near Cape Horn.	N/D '57 p16
<b>I-80; Roseville Fwy. [US 40 Ben Ali-Roseville Fwy.]</b>	
Section near Sacramento Co. line showing construction along new freeway.	J/A '54 p6
George T. McCoy with Selden Menefee, Pres. Greater N. Area Chamber of Commerce, and State Sen. Harold T. Johnson at dedication.	M/J '56 p29
Lt. Gov. Harold J. Powers applies torch to "golden" chain.	M/J '56 p30
Auto caravans head for Sacramento and Roseville after dedication ceremony.	M/J '56 p29
Directional sign with upper and lower case letters.	M/J '56 p31
Completed section of Roseville Fwy.	J/F '57 p58
Section of I-80 [US 40-99E] through rural portion of Roseville.	M/A '61 p31
Same section during construction in 1954.	M/A '61 p34
Subdivision off I-80 [US 40-99E] in Roseville.	M/A '61 p33
Roseville; traffic at intersection of Rt. 65 [US 99E] blocked by SP RR	F '38 p1
Rt. 49 (Mother Lode Hwy.)	
Auburn; construction underway at I-80 [US 40] intersection.	
River grade just above American River before/after widening.	N/D '47 p14
Rt. 89 near Cabin Creek, south of Donner Creek Underpass.	J/A '59 p27
Rt. 96 [Mosquito Ridge Nat Forest Hwy.], Forest Hill unit	
Before construction. N/D '46 p29	
Public Roads Administration engineers at work on rugged terrain.	N/D '46 p37
<b>Plumas Co.</b>	
<b>Rt. 70 [US 40-Alt.], Feather River Hwy.</b>	
Section approaching Storrie Creek Br.	Aug '37 C, p1
Scenic section between Storrie Creek Br. and Rock Creek Br.	Aug '37 p5
Highway as seen from west portal of tunnel through Grizzly Dome.	Aug '37 p5
Crowd of celebrants gathered at portal of Grizzly Dome to participate in dedication of Feather River highway.	Aug '37 p7
Gov. Merriam, Director of PW Earl Lee Kelly, and Chief Winnemucca.	Aug '37 p7
Feather River Hwy. soon after completion.	May '38 p15
Completed surface in scenic region between Howells and Keddie.	Aug '42 p12
Completed highway near Keddie.	Aug '42 p13
Load of logs being hauled from mill on another section of new highway.	Aug '42 p13
Improved section west of Spring Garden.	M/A '58 p8
Section of 2-lane expressway on Rt. 70 [US 40-Alt.].	N/D '61 p52
Arch Rock section.	M/J '50 p45
Failure of light surface road along Feather River north of Quincy due to storm and traffic conditions.	Jan '40 p9
Sharp curve, narrow roadway, and narrow bridge make unsafe road.	Jul '38 p1
US 395; Beckwourth Pass, old and new highway.	S/O '53 p21
Section near Hallelujah Junction.	S/O '53 p21
Western Pacific overpass on Beckwourth Pass.	S/O '53 p55



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES, Continued**

**Riverside Co.**

Arlington-Mira Loma Expressway [FAS project]. M/J '55 p15+

**I-10 [US 60-70-99, Leg. Rt. 26]**

Box Springs-Badlands-Beaumont unit  
 Deep cut on new highway looking toward Gorgonia Range. Aug '37 p17  
 Looking toward Beaumont with Mt. Jacinto in background. Aug '37 p17  
 View of realigned highway west of Beaumont. Aug '37 p17

**Redlands-Beaumont unit**

Eliminating dangerous curves on I-10 [Rt. 26]. Mar '38 p8  
 Construction on stretch of highway between Redlands and Beaumont. Mar '38 p9  
 Highway north of Beaumont looking towards Redlands. Mar '38 p9  
 Grading operations in progress near Beaumont. M/J '50 p24  
 Grading operations on Redlands-Beaumont project. M/J '50 p26  
 Calimesa, aerial view of proposed construction. M/J '50 p23  
 Looking west at westerly intersection to Calimesa. M/J '51 p24  
 Looking east through Calimesa after improvement. M/J '51 p24  
 Looking east near Calimesa turnoff. M/J '51 p25

**Banning-Palm Springs Jct. unit**

One-way channels separate Indio-Palm Springs traffic at junction point,  
 and overhead carrying Palm Springs northbound traffic. May '41 p9  
 Section of new one-way road bed. May '41 p9  
 Spreading cement stabilized base. May '41 p9, 12  
 Banning; freeway under construction. S/O '56 p32  
 Former state highway (Ramsey St.) running parallel to new freeway. S/O '56 p33  
 Completed freeway section through Banning. J/F '57 p56

**I-15; [Rt. 77, US 395; "Inland Route" Hwy.]**

Corona-Elsinore; old route washed out by flood waters in 1938; New highway. O '41 p13  
 Grading operations for relocation in the Elsinore Mts. J/F '49 p34  
 La Cadena freeway section between Riverside and Colton. M/J '52 p4  
 Junction of old and new route just north of Temecula. M/J '52 p2  
 Divided highway section between San Diego Co. line and Temecula. M/J '52 p3  
 Blasting big cut between Antelope Rd. and Rt. 74. M/J '52 p4  
 Section near Perris Blvd. Overcrossing. J/F '54 p31  
 Intersection with Rt. 74 to Hemet. J/F '54 p32  
 Perris Bypass at transition from two to four lanes. J/F '54 p33

**I-215 [US 395]**

Palm lined section in Riverside. N '42 p14  
 Pepper trees previously bordering old 2-lane road now in center dividing strip. N '42 p15  
 Dual roadway sections through Riverside. N '42 p15  
 View west showing island between traffic channels, grade separation. N '42 p15

Pedley; Van Buren Blvd., four-lane [FAS] expressway. N/D '60 p35

**Rt. 60 [Mission Blvd., US 60]**

Mira Loma-Riverside unit, drilling rock prior to excavating roadway cut. J/A '46 p22  
 Mira Loma; texture of old pavement as it looked before resurfacing. N/D '56 p49  
 Plant-mixed surfacing on highway near Mira Loma. M/J '45 p11  
 Portable batch plant at Champagne Siding. N/D '56 p49  
 Old sandbag subgrade, and raking old base course, ca. 1925. N/D '56 p50  
 Road before resurfacing; Road after resurfacing. N/D '56 p51

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Riverside Co., Continued**

West Riverside unit, division strip island.	Apr '41 p6
Divided highway through West Riverside business district.	Apr '41 p6
Large palms and Eucalyptus trees conserved into division strip.	Apr '41 p7
W. Riverside at 4th St. looking northerly.	J/F '48 p4
At junction in W. Riverside.	J/F '48 p4
On Crestmore Rd. looking northerly toward spur track crossing.	J/F '48 p5
Looking northerly toward UP RR Crestmore branch grade crossing.	J/F '48 p5
<b>Moreno Badlands section</b>	
Before/after views of new highway.	M/A '56 p22
Aerial view of new highway; Section of old road near summit.	M/A '56 p23
Camels leading cavalcade of Beaumont and Banning High School bands and parade of cars at dedication.	M/A '56 p24
Official party at ribbon-cutting ceremony.	M/A '56 p24
Construction through the "Badlands" west of Beaumont.	M/J '59 p34
Rt. 62; Dip on North Shore Rd. [Rt. 187].	F '39 p5
Rt. 71 relocated around Prado Dam and Flood Control Basin.	J/A '50 p51
Corona Fwy. crossing over Main St. in Elsinore.	N/D '58 p13
Rt. 74 [Rt. 64, "Palms to Pines Hwy."]	
Palm Springs-Indio; grade curving to Coachella Valley desert floor.	N '40 p26
Scenes on "Palms to Pines" Hwy. from mountain to desert.	N '40 p27
Rt. 86 [US 99, Rt. 26]; Garnet-Thousand Palms unit	
Oasis of Thousand Palms.	J/A '54 p56
Completed construction through Coachella Valley.	J/A '54 p57
Improved section showing traffic heading into San Geronio Pass.	J/A '54 p59
<b>Rt. 91 [Rt. 43; Rt. 18-91]</b>	
Colton-Riverside divided highway.	N '39 p11; F '40 p25
Dividing strip in transition between locations where highways are on different levels; Close-up of two different level sections.	N '39 p11
<b>Corona Bypass</b>	
Grand Blvd. Undercrossing over historic Grand Blvd.	J/A '61 p27
Section through Corona near Temescal Wash Br. and Overhead.	J/A '61 p29
Lineup for Corona Rd. Race on Grand Blvd., 1914.	J/A '61 p30
Completed section of Riverside Fwy near Corona.	N/D '61 p19
<b>Riverside Fwy.</b>	
Planned route of third unit of Riverside Fwy.	S/O '57 p2
Construction at south end of second unit at Arlington Ave.	S/O '57 p2
Construction underway through city of Riverside.	S/O '57 p2
Looking north along Riverside Fwy. from Bridge St. Overcrossing.	S/O '57 p2
Looking north along Riverside Fwy from above 8th St.	S/O '57 p2
Future route of Riverside Fwy. extension through Grand Terrace area.	S/O '57 p2+
Completed sections through city of Riverside.	S/O '57 p6
Riverside Fwy. near Brookhurst Ave.	J/F '58 p8
Southern terminus of Riverside Fwy. at Arlington Ave. in Riverside.	N/D '58 p16
Section of completed Riverside Fwy. through city of Riverside.	N/D '58 p13
Construction at north end of "Missing Link" section.	M/J '59 p28
Work on south end of "Missing Link" section near Riverside.	M/J '59 p32
Transplanted palm trees along 9th St. on-ramp leading to freeway.	M/J '59 p35
Transplanted palms along freeway near 7th St.	M/J '59 p36
<b>Santa Ana Canyon Hwy. [Mountain-to-Sea Hwy.]</b>	
Section located high above the Santa Ana River.	Mar '39 p15
Corona-Orange Co. line unit graded for ultimate 4-lane divided highway section with surfacing for two lanes completed.	F '40 p19

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES, Continued**

**Rt. 111**

Palm Springs-Rt. 86 [US 99] unit	
Highway looking toward San Jacinto Mt. en route to Palm Springs.	Mar '40 p11
View at southeast end of project where road crosses Snow Creek.	Mar '40 p11
Palm Desert as seen from Rt. 111/Rt. 74 intersection looking eastward.	M/J '59 p3
Section through desert country west of Indio.	M/J '59 p8
Section of highway west of Indio.	Jul '37 p11

**Sacramento Co.**

Aerial view of Sacramento showing future I-80, I-80-Rt. 99, and I-5 routes.	S/O '64 p32
<b>Bus-80; North Sacramento Fwy. [US 40; Ben Ali-Roseville Fwy.]</b>	
Construction on North Sacramento Freeway project.	S/O '46 p15
Approach to state Capitol on I-80 [US 40] and Rt. 65 [US 99E].	S/O '50 p105
George T. McCoy with Selden Menefee, Pres. Greater N. Area Chamber of Commerce, and State Sen. Harold T. Johnson at dedication.	M/J '56 p29
Lt. Gov. Harold J. Powers applies torch to "golden" chain.	M/J '56 p30
Auto caravans head for Sacramento and Roseville after dedication ceremony.	M/J '56 p29
Directional sign with upper and lower case letters.	M/J '56 p31
Traffic on Auburn Blvd. before freeway opening.	M/J '56 p31
N. Sacramento Fwy., in operation since 1948.	M/A '56 p43
Suburban freeway near Sacramento.	J/A '64 p50

**Bus-80; Elvas Fwy.**

Aerial view of Elvas Fwy.	N/D '54 p15+
Elvas Fwy showing A St. Overcrossing and floodgates.	N/D '54 p18; M/J '55 p12
Gov. Goodwin J. Knight at Elvas Fwy. dedication.	M/J '55 p10
H. Stephen Chase (CHC) at dedication.	M/J '55 p10
Elvas Fwy. viewed from interchange at Arden Way.	M/J '55 p11
Arden Way off-ramp on Elvas Fwy.	S/O '55 p14
Del Paso Blvd. [US 40] between Sacramento and North Sacramento.	F '41 p20
Dillard Rd near Rt. 16 junction.	M/A '65 p76
Dillard Rd. reconstruction approaching new bridge over Cosumnes Rvr.	M/A '65 p77
Mud road in Sacramento Co., 1911.	M/J '52p47
<b>Folsom Blvd. [US 50]</b>	
Realignment east of Folsom.	Aug '41 p15
Folsom Bypass on new alignment, showing highway through dredger tailings.	N/D '49 p35
Divided highway in vicinity of Alder Creek crossing.	N/D '49 p35
Section of highway showing 8,000-ft. tangent alignment.	N/D '49 p35
Lumbering roller breaks through road barrier at ceremonies opening widened section near Perkins.	N/D '57 p20
Four-lane improvement between Sacramento and Alder Creek.	J/A '58 p5
Improvement at Nimbus intersection.	J/A '59 p28
Watt Ave.; looking north up Watt Ave. prior to construction of extension.	S/O '61 p25
Completed Watt Ave. Br. and freeway section looking south.	S/O '61 p25
I-80; 29th-30th St. section under construction.	N/D '64 p17
Road between Hood and Franklin before first highway bond issue	
Same section of road improved after successful bond issue campaign.	S/O '50 p76
<b>Rt. 99 [US 50-99]</b>	
Galt; new 22-ft. pavement with provision for 4-lane divided highway.	O '38 p15
Old "S" curve through business section past high school.	O '38 p15
S. Sacramento Fwy looking north toward downtown area.	J/F '62 p17
S Sacramento Fwy. during construction.	J/F '62 p18
Stockton Blvd. [US 50-99] at Fruitridge Rd. intersection showing late afternoon traffic before opening of S. Sacramento Fwy.	J/F '62 p16

# **ROUTES, Continued**

## **San Benito Co.**

- US 101 realignment under construction at Pajaro River crossing. Aug '41 p18
- Rt. 25 [Rt. 119]; Pinnacles Hwy., Tres Pinos-Paicines unit
- Section of new highway between Paicines and Tres Pines on route to Pinnacles National Monument. Aug '38 p10+
- Official group at ribbon cutting ceremonies. Aug '38 p11
- Rt. 156, San Juan Bautista Bypass. N/D '61 p66
- State highway typical of those made possible by first bond issue. S/O '50 p98; J/A '52 p45

## **San Bernardino Co.**

- Archibald Ave., rural scene on improved route. J/F '49 p31
- Carbon Canyon Rd. Jan '39 p7
- City Creek Hwy. [City Creek Rd. alt. highway]--See also EROSION CONTROL**
- Etiwanda Ave under construction. J/F '49 p32
- Mail boxes attest to rural character of East 5th St. J/F '49 p32
- Bin-type retaining walls under construction. M/A '48 p15
- Section of improved City Creek Road at Boulder Ave. intersection. M/A '48 p16
- Grading operations on second unit of City Creek Rd. improvement. M/A '48 p14
- Aerial view of City Creek Rd. looking down toward Dutch John's Flat. M/A '48 p16
- Embankment construction on City Creek Rd. J/F '47 p17
- Erosion protection features on embankment construction. J/F '47 p18
- Sidehill excavation work. J/F '47 p18
- Lieut. Gov. Goodwin J. Knight and official party at ribbon-cutting ceremony. S/O '51 p35
- Spectators, car parade, at dedication in Running Springs. S/O '51 p53
- View of City Creek Hwy. looking toward San Bernardino. S/O '51 p52
- Intersection of City Creek Hwy. and Rt. 18 [Rt. 43]. S/O '51 p52
- 8th St. in Colton passing under San Bernardino Fwy. N/D '58 p14
- Highland Ave. (Rt. 30) [Rt. 190], dips in San Bernardino section. Jan '39 p1

## **I-10 [US 60-70-99; Los Angeles-Imperial Valley Hwy.]**

- Colton-Redlands unit; improved section of highway near Colton. Aug '37 p15
- New road pictured on left at junction of highway to San Bernardino. Aug '37 p15

## **Redlands unit [Rt. 99]**

- Proposed improvement of east approach to Redlands. May '38 p19
- Proposed project showing planned changes. May '38 p19
- East city limits project showing old rough road and new 4-lane highway construction. J/A '46 p22
- Hazardous curve at bottom of long steep grade, now eliminated. J/A '46 p22
- Freeway relocation looking easterly from city of Redlands. M/A '47 p10
- Fern St. channelization at grade, new alignment in background. M/A '47 p11
- Typical revision of existing modern 2-lane highway to 4-lane highway. M/A '47 p11

## **Redlands-Crystal Springs Canyon unit**

- Four-lane divided highway under construction east of Redlands. S '42 p5
- Where divided highway merges into 2-lane existing highway. S '42 p5
- Spreading cement-treated base material with self propelled mechanical spreading machine. S '42 p5
- Section of improved alignment through Reservoir Canyon. Jan '39 p15
- Same, showing old route at right. Jan '39 p15
- Grading for section of 4-lane divided highway project near Redlands. D '40 p9

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Bernardino Co., Continued**

**San Bernardino Fwy.**

Concrete paving operations on Ontario-Colton unit.	J/A '46 p20
Section west of Etiwanda Ave. showing heavy mixed truck and passenger traffic on freeway.	J/A '48 p7
Looking toward Ontario through Guasti vineyards.	M/A '53 p18
Completed section near Archibald Ave.	N/D '54 p10
View easterly along San Bernadino Ave.	N/D '54 p10
Lt. Gov. Harold J. Powers cuts ribbon officially opening freeway through Colton.	M/A '57 p22
Looking east along San Bernadino Fwy. through Colton.	
Traffic at intersection of 8th and I St. in Colton, before.	M/A '57 p64
Traffic at same intersection after freeway construction.	M/A '57 p64
Looking east above San Bernadino Fwy. through Colton.	M/A '57 p65
Completed section south of San Bernadino.	M/J '59 p33
Completed section looking north from vicinity of Highland Ave.	M/J '59 p33
Looking north from 16th St. Interchange.	M/A '60 p4+
Southward view from 16th St. Interchange.	M/A '60 p6
North portion of freeway.	M/A '60 p7

**I-15 [National Old Trails Hwy.; Arrowhead Trail; Mormon Trail]**

Baker Bypass section in Mojave Desert between Barstow and Nevada.	N/D '64 p6
I-15/I-40 junction.	S/O '65 p15
Agricultural inspection stop near Yermo.	S/O '65 p16
Section of I-15 through desert terrain.	N/D '66p23

**Baker Grade unit [US 91-466]**

Baker Grade near Halloran Summit Overcrossing.	S/O '61 p2
Rest area off-ramp on east of Baker; Aerial view of rest area.	S/O '61 p4
Section of "parallel lines" across desert.	S/O '61 p5
Section near Mojave River crossing to Barstow.	S/O '61 p58

**Cajon Pass Hwy. [US 395]**

Section showing contractor's aggregate production plant.	M/J '53 p8
Section of completed construction.	M/J '53 p9
Construction one mile south of Cajon Station.	M/J '53 p9
Truck scale installation adjacent to Blue Cut.	M/J '53 p9
View across E. Fork of Cajon Creek (Horse Thief Canyon) showing retaining wall under construction.	M/J '53 p10
Construction operations at Blue Cut.	M/J '53 p10
Gish Underpass as widened to 4-lane divided roadway.	N/D '55 p27
Approaching Cajon Pass from the south; Summit of Cajon Pass.	N/D '55 p27
Construction south of Cajon Pass Summit.	N/D '55 p27
Construction progress on [US 66-91-395] near Highland Ave. (Rt. 30)	N/D '58 p16

**History/origin of route**

Fordson tractors towing grader during construction in 1924.	S/O '65 p17
Unsurfaced Arrowhead Trail west of Cronese Dry Lake in 1927.	S/O '65 p17
Improved section of Arrowhead Trail ca. late 1920s.	S/O '65 p17
Construction near Cajon Summit in 1930.	S/O '65 p17
Road excavation by mule-drawn Fresnos.	S/O '65 p17
Mountain Pass-Las Vegas Hwy. unit [US 91-466] before/after realignment.	Aug '37 p25
Aerial photo of completed highway through Mt. Pass.	Aug '37 p25

# **ROUTES San Bernardino Co., Continued**

## **Victorville-Barstow expressway [US 66-91]**

Grading underway at south end of project near Stoddard-Wells Rd.	S/O '57 p1
Construction underway at north end of Victorville bypass.	S/O '57 p1
Construction at Victorville Overhead and Mojave River Br.	S/O '57 p1
Construction underway at Mill St. to 6th St., San Bernadino.	S/O '57 p3
Construction progress looking north from above Rialto Ave.	S/O '57 p3
View of construction progress from above 5th St.	S/O '57 p3
Right-of-way clearance operation east of I St.	S/O '57 p3
Highland Ave. showing graded area for interchange ramps.	S/O '57 p3
Construction at junction of Riverside and San Bernadino Fwy.	S/O '57 p5
Looking northwest toward entrance to Cajon Pass near Highland Ave.	S/O '57 p5
Looking northwest from Highland Ave. separation.	S/O '57 p5
Trucks waiting in line on Victorville-Barstow job.	S/O '58 p46
Trucks being loaded at Wild Wash base material plant.	S/O '58 p46
Self-propelled mixer laying cement-treated base along expressway.	S/O '58 p47
Northern end of Victorville-Barstow expressway under construction.	N/D '58 p11
Aerial view of Barstow showing construction in distance.	N/D '58 p15
Section of Victorville-Barstow expressway under construction.	J/F '59 p59
Official party at ribbon-cutting for Victorville-Barstow expressway.	J/F '59 p61
Barstow; Main and First Streets, junction of I-40/I-15 [US 66-91]	S/O '61 p57
Junction of I-40/I-15 [US 66-91] on new freeway.	S/O '61 p57+
Mojave Rvr. at Barstow during the storm of March, 1938.	S/O '61 p59
<b>I-40 [US 66]</b>	
Official part at ribbon-cutting ceremony, opening section south of Needles.	J/F '58 p57
Improved section through Needles.	M/J '61 p56+
<b>Pigeon Pass Rd. [Barton Rd.] from Benton Ave.</b>	
View from Terracino Ave., El Camino Real marker in background.	J/F '50 p43
Old road through Pigeon Pass; New, relocated highway.	J/F '50 p43
Construction scene on Pigeon Pass Road.	J/F '50 p44
Widening operations at intersection of Waterman Ave. necessitated additional cover on Gage Canal.	J/F '50 p45
Riverside Ave. [FAS 707] after widening.	J/F '61 p55
Rt. 2-138 west of Cajon.	M/J '59 p30
<b>Rt. 18 [Rim of the World Hwy.]</b>	
Victorville Hwy. as seen from Rocky Hills summit.	S/O '47 p20
Portion of Victorville Hwy. near "The Narrows."	S/O '47 p21
Victorville Hwy. seen through gap in Rocky Hills.	S/O '47 p21
Rt. 18-30 between Snow Valley and Big Bear Lake.	N/D '58 p47
<b>Rt. 38 [Big Bear Loop Hwy.]</b>	
Opening ceremonies for new section at Onyx Summit.	S/O '61 p15
Paving plant in operation during construction.	S/O '61 p16
Highway and surrounding country shortly before opening to public.	S/O '61 p16
Traffic passing over new section following opening ceremonies.	S/O '61 p17
Rt. 62; Morongo Canyon Fwy. section.	M/A '64 p7+
Safety rest area and fountain along freeway.	M/A '64 p7
Approaching safety rest area in middle of canyon.	M/A '64 p9
Aerial view looking southeast down canyon.	M/A '64 p9
<b>Rt. 66 (Foothill Blvd.) [Rt. 9]</b>	
Section west of Sierra Way before widening.	S '37 p7
Artists conception of how this section will look after improvement.	S '37 p7
New 4-lane link of Foothill Blvd.	Jul '38 p17
Gov. Merriam at ribbon cutting ceremony.	Jul '38 p17

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Bernardino Co., Continued**

Rt. 71; Corona Fwy. under construction near Pine Ave. south of Chino. M/J '59 p28  
 Prado Dam Hwy.--*See Riverside Co.*  
 Rt. 178; Salt Wells Canyon Rd. [Rt. 212], roadmixed surfacing near Salt Wells. M/J '51 p34  
 US 395  
     Sharp turn on unimproved Mojave Desert section at Adelanto. M/J '52 p2  
     Winding grade near Cajon Pass summit leading to Lake Arrowhead. Jan '39 p1  
     Cajon Pass unit under construction. M/J '52 p6  
         Construction at Cleghorn Creek showing upper and lower bridges. M/J '52 p5  
 Washington St.-Barton Rd. [FAS Rt. 714] after widening. J/F '61 p55+; N/D '61 p44  
 Winding, narrow dirt road between Camp Seeley and Cedar Springs. Jan '39 p7

**San Diego Co.**

Alvarado Canyon FAS job; La Mesa at Jackson St. intersection. N/D '55 p1  
 Buena Vista Lagoon, removing unsuitable material at. M/J '53 p12  
 Del Dios Hwy. [FAS Rt. 728] reconstruction near Lake Hodges Dam. M/J '59 p22+  
 Douglas St. extension before/after slope was filled in to make grade. Jul '39 p20  
     Douglas St. extension, San Diego. S/O '44 p3; M/A '46 p10  
     Douglas St. extension near India St. utilizing unimproved canyon. M/A '45 p22  
 El Cajon Blvd. in San Diego, 1937. F '38 p20  
 Fairmont Blvd., San Diego showing construction on Aldine Dr. Undercrossing. J/A '60 p51

**I-5 [US 101, Pacific Hwy.]**

Access road projects  
     Pacific Hwy.-Washington St. route before grading operations. S/O '44 p3  
     Harbor Dr. South, near 28th St. S/O '44 p3  
     New Pacific Hwy. S/O '44 p3  
 Cardiff-by-the-Sea section between Del Mar and Encinitas. N/D '65 p11  
 Encinitas; section through poinsettia-growing area. J/A '66 p23  
 Freeway "Y" looking south at city of Oceanside. S/O '59 p4  
 Leucadia section. O '37 p9  
     Type of 4-lane divided highway used on route through Leucadia, showing landscaping of center strip. N '37 p4  
     Steel guard railings, and trees left standing on highway widening. S/O '53 p52  
     Leucadia vicinity indicating future route of Coastal freeway. N/D '58 p36

**Oceanside-San Onofre unit**

Section over Santa Fe tracks near San Onofre nearing completion. O '37 p7  
 Bad curve through underpass, and new highway under construction. O '37 p7  
 Looking south from new Santa Margarita River Br. showing new 40-ft. asphalt-concrete pavement. O '37 p7  
 Gov. Merriam and motion picture star Leo Carrillo at dedication. Apr '38 p18  
 Group at "Wedding of the counties [San Diego-Orange]" ceremony at dedication of new highway. Apr '38 p20  
 Ample separation strips on 4-lane section of realignment render head-on collisions practically impossible. Apr '38 p19  
 View of 4-lane divided highway section on new alignment. Apr '38 p19

**Oceanside-San Clemente unit**

6-ft. separation by means of double stripe north of Flores. M/J '47 p4  
 Weather Station, Santa Margarita Valley with lanes separated by curbs. M/J '47 p4

**Rose Canyon improvement**

Elvira Station showing new divided highway with safety features. D '38 p15  
 Curbing of center dividing strip with reflective paint for added safety. D '38 p15  
 New divided highway through Mission Bay Park area showing recessed paneled curb of parting strip. D '38 p16  
 Rose Canyon section two miles north of Balboa Ave. N/D '58 p38



# **ROUTES San Diego Co., Continued**

San Mateo Creek Valley, realignment for southbound traffic across	M/J '46 p24
San Luis Rey Br.-Aliso Creek unit, grading operations.	M/J '46 p23
I-5 [US 101] through San Diego in vicinity of Washington St.	N/D '58 p39
Dist. Engineer Jacob Dekema riding shotgun on Wells Fargo stagecoach in celebration of opening of 25-mile unit.	J/A '66 p16
<b>I-5; Montgomery Fwy. [US 101]</b>	
International border station at Tijuana, looking north on freeway.	M/J '55 p20
South end of freeway with San Ysidro in U.S., Tijuana in Mexico on right.	M/J '55 p20
Traffic on freeway at 18th St. Undercrossing.	M/J '55 p21
Section near Main St. interchange.	M/J '55 p22
Approaching freeway from N. 8th St. intersection in National City.	M/J '55 p22
Official speakers and party at Montgomery Fwy. dedication.	S/O '55 p46
Beginning US 101 and Montgomery Fwy. at Mexican border.	N/D '55 p5
<b>I-5; Oceanside-Carlsbad Fwy. [US 101]</b>	
Construction on north end near Hill St. Overcrossing.	N/D '51 p30
Construction near old bridge over San Luis Rey River.	N/D '51 p30
Construction at Mission Ave. separation.	N/D '51 p32
Traffic congestion Hill St. in Oceanside prior to freeway opening.	N/D '53 p16
New and old routes of freeway through Oceanside.	N/D '53 p17
Freeway through Oceanside near Vista Way grade separation.	N/D '53 p18
Oceanside-Carlsbad Fwy. near Brooks St. overcrossing.	N/D '53 p19
Freeway through Carlsbad near Tamarack overcrossing.	N/D '53 p20
Scene at dedication.	N/D '53 p21
Section of Oceanside-Carlsbad Fwy. looking south.	J/A '54 p1
<b>I-5; San Diego Fwy.</b>	
Adopted line of San Diego Fwy from above 27th St. and National Ave.	N/D '58 p36
Cleared areas for San Diego Fwy. construction in downtown San Diego.	S/O '60 p13
San Diego Fwy at 4-level I-5/Rt. 163 [US 395] interchange.	J/A '64 p2+
Section through San Diego's business district.	J/A '64 p3+
Section through San Diego's business district, showing Balboa Park and I-5/Rt. 163 [US 395] interchange.	J/A '64 p4
Old Pacific Hwy. near Ash St. ca. 1940s.	J/A '64 p5
Rt. 67 in Grossmont Summit section just south of I-8 [US 80].	J/A '60 p4
<b>I-8 [US 80]</b>	
Alpine; grading and paving operations on section of I-8 [US 80].	S/O '51 p21
Balboa Ave. in San Diego, looking northeast.	M/J '59 p5
Eight-lane expressway section in San Diego at El Cabrillo Overcrossing.	M/J '61 p23
El Cajon unit, ribbon-cutting ceremony for.	S/O '61 p64
Grossmont Summit section of new freeway.	S/O '61 p65
Fill section in El Cajon residential area.	S/O '61 p67
Section near Grossmont Blvd. separation and pedestrian overcrossing.	N/D '58 p 39
Looking toward El Cajon at connection with Bus-80.	S/O '65 p40
Section approaching Los Coches Rd. undercrossing.	S/O '65 p40
<b>La Mesa-El Cajon unit</b>	
Divided highway, showing traffic separations using reflectorized curbs, profile separations and channelized islands.	S '41 p21
Alvarado Canyon Rd. looking easterly toward La Mesa.	M/A '50 p44
Section requiring heavy excavation, looking westward from La Mesa.	M/A '50 p45
View northwesterly along project near junction with El Cajon Ave.	M/A '50 p45
Looking east on section near La Mesa.	J/F '58 p55
Construction in progress near Lake Murray Blvd. Overcrossing.	J/F '58 p55
Construction near I-8/Rt. 67 [US 80/Rt. 67] interchange.	J/F '58 p55

California Highways and Public Works  
PHOTOGRAPH INDEX 1937-1967

## ROUTES San Diego Co., Continued

Mission Valley Rd.	
Improved section of near Rt. 163 [US 395] Interchange.	J/A '60 p6
Poorly aligned section with steep grade and narrow pavement	F '39 p5
At Morena St. intersection, widened and channelized.	N/D '43 p3
Morena Blvd.-Taylor St. section	M/J '61 p24
Mountain Springs Grade; realigned section ascending In-ko-pah Mt.	Jan '40 p27
Grading completed through cut; Heavy grading and drilling scenes.	Apr '41 p21
Existing road showing extreme curvature.	Apr '41 p21
Devil's Canyon section after improvement.	J/F '64 p46
Modern carbide insert drill bit with two types from older project.	J/F '64 p46
Torrey Pines-La Mesa section.	O '37 p9
Section of highway which replaced Torrey Pines Grade.	S/O '45 p9
Walker Canyon; Boulevard-Imperial Co. line unit	
Wagon drills preparing powder holes for blasting to cut through rocks.	J/A '66 p10
Structural plate pipe used for culvert on job.	J/A '66 p10
Survey Party Chief setting slope stakes in rock.	J/A '66 p11
<b>I-15 [US 395]</b>	
San Diego-Miramar/Miramar-Lake Hodges units before opening of new route.	N/D '50 p17
Sections of new route, looking north.	N/D '50 p18
Looking north from Linda Vista Road.	N/D '50 p19
Wahbash Blvd. [Rt. 283] at interchange with improved Rt. 94.	J/A '60 p27
Murphy Canyon Rd. near junction with I-8 [US 80].	J/A '60 p28
Looking south along Murphy Canyon Rd. and Ward Rd.	J/A '60 p29
Mountain Pass; improved section near Bailey Rd. Overcrossing.	J/F '64 p54
Wheaton Canyon section; Nipton Rd Overcrossing section.	J/F '64 p54
Snow surrounding Joshua trees at summit before construction.	J/F '64 p55
Same section after improvement showing Bailey Rd. Overcrossing.	J/F '64 p55
Two-lane section near Poway Rd.. before construction.	M/A '65 p65
Old route north of Escondido.	M/A '65 p65
East face on Big Cut showing 100,000-cubic yard slide	M/A '65 p66
Section of improved I-5 freeway.	S/O '65 p13
Miramar Road access improvement near US 101.	S/O '44 p3
Mission Gorge Rd. realignment, section of old road.	M/J '65 p18
Rock cut and embankment involved in reconstruction.	M/J '65 p19
Mission Valley Rd.--See I-8	
<b>Mt. Palomar Hwy. [Palomar Observatory Rd; "Highway to the Stars"]</b>	
Powder blast breaks down last obstruction on Palomar Mt. road.	Jan '37 p17
Graders opening last cut on highway to Palomar summit.	Jan '37 p17
Looking toward observatory site, and steel structure for telescope.	Jan '37 p17
Steel structure being erected which will support telescope of world's largest observatory.	
Huge rotating dome of Palomar observatory for 200 inch telescope.	Jan '37 p17
Transporting telescope parts over state highway to Palomar Mt.	S '39 p8
Telescope horseshoe and large girder on mountain grade.	S '39 p9
Large telescope part being moved on 4-axle low bed trailer.	S '39 p9
Section of new highway on Palomar Mt. grade.	S '39 p10
County road to observatory site before rebuilding.	S '39 p10
Section of Mt. Palomar Hwy.	N/D '45 p6
Poway Rd. widening project north of San Diego.	N/D '64 p39
Rosecrans Blvd. after improvement; Old highway before improvement.	Jul '40 p11
Rosecrans-Mission Valley divided highway	N/D '43 p3

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Diego Co., Continued**

<b>Rt. 75</b>	
Fred W. Spears (CHC) dedicating Palm City-Coronado section.	M/J '55 p38
Southern end of Silver Strand on Palm Ave. prior to construction.	M/J '56 p21
Looking toward Coronado, new southbound lanes under construction.	M/J '56 p22
Northerly end of Strand before construction.	M/J '56 p22
Rt. 75/I-5 [US 101] junction in Palm City.	M/J '56 p23
Silver Strand during construction near Silver Strand State Park.	M/J '56 p24
North end of Silver Strand approaching Coronado Hotel.	M/J '56 p24
<b>Rt. 76 [Rt. 195] near Oceanside with poor alignment and blind curves.</b>	F '39 p4
<b>Rt. 78 [Leg. Rt. 198, Lakeside-Ramona road]</b>	
Relocated highway around San Vicente Dam.	J/F '44 p15
San Vicente Dam under construction across highway showing hole left for traffic during road relocation.	J/F '44 p14
Section between Oceanside and Vista.	N/D '55 p3
Section east of Ramona with poor alignment and narrow pavement.	F '39 p5
Section near Mar Vista Overcrossing.	J/F '65 p53
Section near Encinitas Rd. undercrossing.	J/F '65 p54
<b>Rt. 94-67 (San Diego-La Mesa)</b>	
Flooded "dip" on Rt. 94.	F '39 p5
Rt. 163 [US 395], dangerous curves on.	F '39 p3
Rt. 94/Rt. 67 junction near Panorama Dr.	J/A '57 p46
Rt. 67 near Mariposa St. overcrossing.	J/A '57 p46
Rt. 94 construction near Wabash Blvd. interchange.	M/J '59 p45
Section under construction near College Ave. undercrossing.	J/A '57 p47
Construction under way on Nimitz Ave. near Mission Bay Park.	M/J '59 p5+
A narrow road with poor alignment and hazards caused by inadequate slope.	F '39 p4
<b>Rt. 163; Cabrillo Fwy. [US 395]</b>	
San Diego Mayor Harley Knox breaking ground for Cabrillo Fwy.	M/A '46 p5
Cabrillo Fwy traverses 11th Ave. Canyon through Balboa Park.	M/A '46 p6
Beginning grade operations on Cabrillo Fwy.	M/A '46 p6
Aerial view of Cabrillo Fwy. under construction.	N/D '46 p18
Grading operations near University Ave.	N/D '46 p42
Grading operations on first big cut north of San Diego River.	N/D '46 p42
Construction looking north toward Washington St. Bridge.	N/D '46 p42
Construction looking west from Pascoe St. ramp toward Cabrillo Fwy.	N/D '46 p42
Construction near Mission Valley showing interchange and San Diego Rvr.	J/A '47 p3
Looking toward Pascoe St., Washington St., and University Ave. bridges.	J/A '47 p4
View south from Laurel St. Br.	J/A '47 p4
Aerial view of project and environs.	J/A '47 p5
Looking south across Mission Valley.	J/A '47 p6
Concrete paving operations through Linda Vista.	J/A '47 p6
Cabrillo Fwy during and after construction.	M/A '48 p1
Aerial view of Cabrillo Fwy. traversing Hillcrest District.	M/A '48 p2
Looking north across interchange connecting with Mission Valley Rd.	M/A '48 p3
Looking south toward Pascoe St. and Washington St.	M/A '48 p4
Ribbon cutting ceremony at dedications of Cabrillo Fwy.	M/A '48 p5
Section of freeway through Balboa Park.	M/A '48 p4; J/A '55 p10
Section looking northerly toward Mission Valley. (I-8)	S/O '50 p108
Section near downtown San Diego.	S/O '50 p108
Cabrillo Fwy. before tree clearing operations began.	S/O '60 p14

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Diego Co., Continued**

Sweetwater Rd. crossing toward reentry into Sweetwater Rd. at northeast end of South Bay Fwy. project.	J/F '64 p18
Sweetwater Rd. at National City end of project.	J/F '64 p20
Section near middle of project.	J/F '64 p21
Washington St., San Diego after widening.	J/A '60 p51; N/D '61 p43

**San Francisco Co.**

BART; President Lyndon Johnson and official party at BART ground-breaking.	J/A '64 i.cvr.
--	----------------

**Bay Area freeways, general**

Aerial view of S.F. showing freeway units under construction and yet to be constructed.	M/A '54 p3
Typical state-built freeway development.	N/D '58 p5
Aerial view of San Francisco freeway system.	J/A '60 p56

**I-280 [Southern Fwy., Rt. 82]**

Section near Newcomb St., looking toward intersection with Bayshore Fwy.	M/J '64 p37
Paving operations along section of I-280 [Rt. 82].	M/J '64 p37
Ocean Ave.-Mission St. section under construction.	M/J '64 p38
Grading work in progress for San Jose Ave. relocation.	M/J '64 p38
Construction near Theresa St. pedestrian overcrossing.	J/A '64 p9
Section at junction with US 101.	J/A '64 p12; N/D '64 p18
Traffic being rerouted around construction at Ocean Ave. overcrossing.	J/A '64 p13
Detouring traffic from completed portion east of reconstructed Mission St. viaduct to old Alemany Blvd.	J/A '64 p14
Section near San Jose Ave.-Sickles Ave. undercrossing.	J/A '64 p15
Access ramp construction near Monterey Blvd.	J/A '64 p16
Section under construction in San Francisco.	N/D '65 p18

**I-405 (Embarcadero Fwy.)**

First stage of Embarcadero Fwy. construction.	M/A '56 p6
Connection to Main and Beale Streets under construction.	M/A '56 p6
First unit of Embarcadero Fwy. under construction.	J/F '57 p57
Cypress St., showing heavy traffic prior to construction of new facilities.	J/F '57 p31
Ramp connection over old Bay Br. approach for eastbound traffic.	J/F '57 p31+
Freeway under construction near Main and Beale streets.	J/F '57 p31
Construction progress toward Embarcadero.	J/F '57 p33
Construction on single and double decked structures.	M/A '57 p5
B.W. Booker, Assistant State Hwy. Engineer at dedication of first unit.	M/J '57 p47
Ribbon-cutting ceremony at first unit dedication.	M/J '57 p47
Construction progress showing Ferry Building in foreground.	S/O '57 p46
Partially completed section of Embarcadero Fwy.	J/F '59 p49
Embarcadero Fwy. looking toward Bay Br.	M/A '59 p35
Assembling piledriver used on Embarcadero Viaduct job.	M/A '59 p36
Viaduct under construction.	M/A '59 p37
Fenced-off vista area on upper deck.	M/A '61 p2
Officials inspect vista area on its opening day.	M/A '61 p2
Entrance to vista area from Broadway on-ramp.	M/A '61 p2
Clay-Washington St. ramps under construction.	M/J '65 p34
Market St., improved section in southwest San Francisco.	N/D '60 p36

# **ROUTES San Francisco Co., Continued**

## **Rt. 1 (19th Ave.) [I-280; Leg. Rt. 56]**

19th Ave. before/after widening of pavement and setting back of residences. N '40 p16  
 19th Ave. at Taraval St. before/after widening. N '40 p17  
 Park-Presidio Blvd. before/after divided pavement improvement. N '40 p18

## **Presidio Approach to Golden Gate Br. [Presidio Fwy.]**

Main Funston Ave. approach to Golden Gate Br. through Presidio. Jun '39 p4  
 Pouring last section of deck of Viaduct "A" which carries the approach  
 highway over West Pacific arterial in the Presidio. Jun '39 p7  
 Funston Ave. approach under construction through Presidio. Mar '40 p22  
 South approach walls and portal of cut and cover tunnel under Presidio  
 golf course. Mar '40 p23  
 Mechanical float finisher and paver surfacing 4-lane divided highway. Mar '40 p23  
 Dedication dignitaries. May '40 p3  
 Funston Ave. approach looking toward Golden Gate Br. May '40 p3  
 Traffic starting over Funston Ave approach. May '40 p15

## **Treasure Island-Bay Br. Hwy.**

Aerial photo/drawing of planned roadways. Jun '38 p22  
 Steel overhead motorists will use returning from the Expo to East Bay  
 points via bridge. Jun '38 p23  
 Multi-purpose structure involving problems of horizontal and vertical,  
 reached via Bay Br.  
 Portion of 6-lane state-built ramp approach. Jun '41 p7  
 Photo/sketch of proposed improvements to Bay Br. ramp connection. M/A '54 p19  
 Unidentified freeway section in Bay Area. M/J '64 p20

## **US 101; Bayshore Fwy. [James Lick Memorial Fwy.]**

Director Clark handing proposed Bayshore Fwy. report to Chairman Barrett. Apr '40 p8  
 Aerial photo of Bayshore Fwy. project under construction in S.F. M/J '50 p27  
 Chester H. Warlow (CHC) at dedication. M/J '51 p1  
 Col. Jno. H Skeggs, Asst. State Highway Engineer, at dedication. M/J '51 p1  
 S.F. Mayor Elmer E. Robinson and official party at ribbon cutting ceremony. M/J '51 p2  
 Aerial view of completed section of Bayshore Fwy. in S.F. M/J '51 p3  
 Aerial view of Bayshore Fwy. looking toward Bay Bridge. M/J '51 p4  
 Section of Bayshore Fwy. which makes travel to the Cow Palace easy. S/O '51 p54  
 Construction between Bryant St. and Army St. J/F '53 p4  
 Construction from Army St. to 17th St. J/F '53 p5  
 Aerial view of San Francisco showing portion of Bayshore Fwy. N/D '53 p39  
 S.F. mayor Robinson cutting ceremonial chain at dedication. N/D '53 p39  
 S.F.-Burlingame section under construction. J/A '47 p10+

## **Sierra Point-Candlestick Cove Open Water Fill unit**

Aerial views of experimental fill areas. S/O '52 p13+  
 General area of experimental fill and borrow pit of Sanitary Fill Co. S/O '52 p16  
 Fill in place for overwater section across Candlestick Cove. J/A '54 p3; N/D '55 p9, 28  
 Construction operations for closing gap at Candlestick Point. M/A '55 p4  
 Fill operation midway between Candlestick Pt. and Sierra Pt. M/A '55 p4  
 Open water fill across Candlestick Cove. M/A '56 p6  
 Open water fill under construction; Construction at Sierra Pt. M/A '57 p4  
 Old highway and railroad tunnel at Sierra Pt. prior to freeway. J/A '57 p57  
 Same section in 1957, with the point and railroad tunnel eliminated. J/A '57 p57  
 S.F. Mayor George Christopher performing ribbon-cutting ceremony  
 at dedication of overwater section of Bayshore Fwy. J/A '57 p58  
 Aerial view of Candlestick Park near over water section. M/J '61 p9  
 Central S.F. showing construction extending toward connection with Bay Br. M/A '54 p4

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Francisco Co., Continued**

Army St. interchange-Alemanay Blvd. unit, and 3rd. St. construction.	M/A '54 p5
Construction progress between 3rd St. and Alemanay Blvd.	M/A '54 p6
View of S.F. skyline, entering city from south on elevated structure.	J/A '54 p8+
Overlooking Potrero Ave.	J/A '54 p8
1st. St. off-ramp for dispersal of Bay Br. traffic.	J/A '54 p9
5th St. ramp looking westerly toward Twin Peaks from Bay Br.	J/A '54 p7
Gov. Knight inspecting 13th and Mission St. unit with contractor Harney.	N/D '54 p21
Construction on final units of connection to Bay Br. approach.	M/A '55 p3
B.W. Booker, builder of skyways, at dedication of Bay Br. approach.	J/A '55 p11
Frank Durkee, Miss San Francisco contestants, and official guests at ribbon-cutting ceremony.	J/A '55 p11
Bayshore Fwy. approach to Bay Bridge.	J/A '55 p14
Wendell F. Pond, designer of Bayshore Fwy. and Pres. Mellon of S.F. Chamber of Commerce with plaque presented to F.W. Panhorst by AISC.	J/A '55 p15
Official caravan on new Bay Br. approach for ribbon-cutting ceremony.	J/A '55 p15
Section in S.F. near Bay Br., showing approach ramps.	M/A '56 p5; M/A '56 p6
Construction from 3rd St. interchange looking toward Sierra Point fill.	S/O '55 p61
Bayshore Fwy. and 3rd. St. Overcrossing after completion of freeway, 1957.	J/F '64 p17
Maintenance crew beginning work on section in S.F.	J/A '60 p45
Section near S.F. International Airport.	M/J '61 p8
Frontage road along freeway showing landscaping to screen freeway lanes.	M/J '61 p11
Silver Ave. off-ramp near 3-level interchange for Southern Fwy.	M/J '61 p12
<b>US 101; Central Fwy.</b>	
Initial unit, from junction with Bayshore Fwy. at Division St. interchange.	M/A '55 p3
Central Fwy. under construction.	M/A '58 p11
Ramps under construction.	M/A '58 p12
Central Fwy. extension from S. Van Ness Ave. to Turk St.	M/A '59 p11
Completed section between S. Van Ness Ave. and Turk St.	M/J '59 p41
Extension to Golden Gate Ave near Civic Center.	J/F '60 p36
Central Fwy. looking southeast from Turk St. and Gough St. terminus.	M/A '60 p22
Yerba Buena Island, sketch of proposed improvements to Bay Br ramp connection superimposed on aerial photograph.	M/A '54 p19
<b>San Joaquin Co.</b>	
Grant Line Rd. looking west from Fremont Rd. before/after improvement.	M/A '51 p32+
I-5 [Westside Fwy.] Adopted route near Delta-Mendota Canal.	S/O '60 p55
Adopted route near Stockton.	S/O '60 p54
Adopted route near junction of Lassen Ave. and Avenal Cutoff Rd.	S/O '60 p53
<b>I-205 [US 50]</b>	
Resurfacing work between Tracy and Banta Rd.	S/O '44 p26
Stockton; aerial view of old and new locations of I-205 [US 50].	M/A '50 p13
Tracy-Altamont Pass Expressway	
Section near Tracy crossing Delta-Mendota Canal.	S/O '54 p5
Typical traffic slow-up on old Altamont Pass-Tracy route.	N/D '54 p38
Aerial view of expressway looking east toward Tracy.	N/D '54 p40
Mossdale; New lanes and construction near Rt. 120 [Rt. 66] interchange.	J/A '57 p16
Section at Mossdale looking south.	J/A '57 p16
South of French Camp showing temporary transition of 4-lane divided highway to 2-lane road before improvement.	J/A '57 p18
Construction north of Mossdale near San Joaquin River twin bridges.	J/A '57 p18
Newly constructed southbound lanes.	J/A '58 p22

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Joaquin Co., Continued**

Pacific Ave. in 1950 prior to reconstruction under FAS program.	J/F '54 p53
Pacific Ave. at Five-mile House intersection.	J/F '54 p54
Lower Sacramento Rd. on Pacific Ave. extension near Stockton.	J/F '54 p55
South end of project near College of Pacific buildings.	J/F '54 p60
Rt. 12; Lodi-Rio Vista Cut-Off approaching Mokelumne River Br.	S '42 p3
Rt. 88 [Rt. 97], new alignment across Mokelumne Rvr. near Clements.	J/A '54 p37
<b>Rt. 99 [Rt. 4; US 50-99]</b>	
Flooded Rt. 99 south of Mokelumne River Br., ca. early 1930s.	J/F '65 p27
Lodi-Lind's Airport unit	
Construction at crossing of Mokelumne River just north of Lodi.	M/J '57 p44
Four completed lanes, and temporary crossing at grade during construction of Peltier Rd. overcrossing.	M/J '57 p45
Manteca Bypass	
Traffic congestion in Manteca Yosemite Ave./Main St. (Rt. 120/Rt. 99) [Rt. 66/Rt. 99] intersection before bypass.	N/D '55 p22
Completed bypass between Cottage Ave. and Louise Ave.	N/D '55 p23
<b>Ripon-Manteca expressway</b>	
Flagman regulating traffic through construction from elevated platform.	N/D '53 p25
Construction at Ripon end of project.	N/D '53 p25
Construction at Jack Tone Rd. overcrossing.	N/D '53 p64
Section looking northwest toward Manteca near Jack Tone Rd.	S/O '54 p2
Sacramento-Lodi Expressway	
Gov. Knight operating bulldozer to break ground for first unit.	N/D '54 p43
Section of freeway between Jahant Rd. and Sacramento Co. line.	M/A '56 p38
Section of Sacramento-Lodi Fwy. between Galt and Lodi.	J/F '57 p59
Salinda; old and new sections of highway.	J/F '48 p35
Section crossing Tidewater Southern RR tracks near Turner Station, 1929.	J/F '65 p27
Stockton Bypass, grading for realignment underway.	S/O '48 p29
Stockton Bypass near Main St. Overcrossing.	S/O '54 p3
Stockton Expressway, aerial view of old and new locations of Rt. 99.	M/A '50 p13
<b>Stockton-Lodi Fwy.</b>	
Lodi-Stockton 4-lane divided highway.	S/O '48 p27
Mixer charging, front view of spreading machine.	N/D '46 p7
Johnson finishing machine at work on portland cement concrete.	N/D '46 p38
Position of new lane in relation to old lane.	N/D '46 p39
4-lane divided highway between Stockton and Lodi.	N/D '47 p24
Full-freeway conversion	
Linden Rd./Rt. 99 intersection near Stockton before conversion.	J/F '65 p25
Frontage road bordering US 99 near Morada Lane.	J/F '65 p26
Rt. 99/Rt. 120 (Yosemite) intersection east of Manteca, 1964.	J/F '65 p28
Same, prior to construction of freeway ca early 1950s.	J/F '65 p28
Cherokee Rd. intersection prior to reconstruction as full freeway.	J/F '65 p29
Cherokee Rd. overcrossing following freeway construction.	J/F '65 p29
Rt. 120/I-205 [US 50] intersection (Mossdale)	
Traffic on old road, new road at right, Mossdale Br. in distance.	S/O '46 p20
<b>San Luis Obispo</b>	
Hearst Castle access road after reconstruction.	S/O '59 p33
Rt. 1 [Rt. 56]; access road between San Luis Obispo and Camp San Luis Obispo.	J/A '45 p24
Rt. 41 [Rt. 125]	
Atascadero-Morro Bay Hwy., vanguard of automobile caravan at dedication.	Jul '38 p19
Reconstructed section in northern part of county.	S/O '59 p35
Section near Shandon.	J/F '60 p30



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Luis Obispo Co., Continued**

**Rt. 46 [Rt. 33]**

Winding road, blind curves on Cambria-Famoso lateral east of Paso Robles.	O '38 p3
Improved section of [US 466] at ascent to Polonio Pass.	M/J '60 p40
Improved alignment near town of Shandon.	M/J '60 p41
Intersection with Rt. 41.	M/J '60 p42
Aerial view of improved highway looking west from Cholame.	M/J '60 p42
Rt. 58; Portions of relocated highway along the Salinas River.	F '42 p5
San Luis Obispo-Baywood Park county road.	S/O '58 p24

**US 101**

Arroyo Grande Bypass, clearing and grading for freeway project.	S/O '58 p27
Completed bypass on US 101.	J/F '60 p36
Arroyo Grande-Pismo Beach full freeway near Grover City interchange.	J/F '57 p21
Atascadero; full freeway at interchange for Rt. 46 [US 466] to Morro Bay.	J/F '57 p23
Completed section of freeway from Santa Margarita to Atascadero.	J/F '57 p23

**Cuesta Grade**

Cuesta Grade on US 101, late 1920s.	J/A '60 p54
Cuesta Grade, ca. 1915; 1936; 1960.	S/O '60 i.cvr.
Trucks excavating summit cut and hauling material down existing highway to fill north approach of overhead crossing SP tracks.	Aug '37 p13
Two tractors, master bulldozer, and roller pioneering one of fills.	Aug '37 p13
Leveling and compacting fill at north approach to overhead crossing.	Aug '37 p13
One of many Cuesta Grade curves now being eliminated.	May '38 p4
Looking south from Station 216 showing slide with roadbed cut below.	May '38 p5
Unloading top of slide at Station 210.	May '38 p5
Looking south from existing Cuesta Grade.	May '38 p6
Looking south from Station 172.	May '38 p7
New Cuesta Grade construction ready for fine grading.	May '38 p7
Air spade breaking bank and air tampers back-filling on grade.	May '38 p28
Section of new 4-lane divided highway through Cuesta Pass.	D '38 p6
Wide roadbed and easy grade of new Cuesta Pass route.	D '38 p7
Construction scene on huge fill.	D '38 p7
One of many steep, sharp curves on old narrow La Cuesta Rd.	D '38 p8
General view of old winding grade.	D '38 p8
Parking space provided along La Cuesta.	D '38 p9
Cuesta Pass highway before improvement; after improvement.	S/O '50 p19
View looking southerly toward Cuesta Pass.	N/D '50 p22
New lanes constructed for south bound traffic on left, north bound traffic carried by existing roadbed, right.	N/D '50 p23
View showing variation of width of median & between grading lines.	N/D '50 p27
Section of US 101 on Cuesta Grade just north of San Luis Obispo.	J/A '54 p2
Widening US 101 through Cuesta Grade.	S/O '58 p23
Miles Br. unit construction, and rough grading near San Luis Obispo Cr.	Aug '41 p11
Line indicating new route, compared to old.	Aug '41 p11
Narrow undergrade crossing on curve.	O '38 p1
Paso Robles Bypass on US 101.	S/O '58 p27
Paso Robles-San Miguel expressway near San Marcos Creek.	M/J '55 p27
Section near Paso Robles; Northern terminus at San Miguel.	M/J '55 p28+
Pismo Beach; sharp curves, narrow road, and steep grades.	O '38 p2
Freeway construction through Pismo Beach.	J/A '61 p3+
Old route through Pismo Beach prior to construction of freeway.	J/A '61 p4

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Luis Obispo Co., Continued**

**San Luis Obispo (city)**

Construction north of French St.; Section of roadway.	S/O '48 p43
4-lane divided fwy. approaching San Luis Obispo from the north.	S/O '48 p44
4-lane divided freeway at southerly entrance to San Luis Obispo.	J/F '49 p17
Relocated portion of US 101 south of San Luis Obispo.	J/F '49 p41
4-lane divided freeway approaching San Luis Obispo from the north.	S/O '50 p134
Freeway relocation of US 101 south of San Luis Obispo.	S/O '50 p134
Section near San Luis Obispo.	M/J '51 p33
Full freeway development through San Luis Obispo.	J/F '57 p21
San Luis Obispo Bypass on and off-ramps at California Blvd.	
Section near Buena Vista Overpass, Monterey Heights outer highway.	S/O '54 p47
Section near Santa Rosa St. Overpass.	S/O '54 p47+
Looking north from Marsh St. on-ramp.	S/O '54 p48
San Miguel Bypass, north end looking toward Camp Roberts.	M/A '58 p48
San Miguel Bypass on US 101.	S/O '58 p27
Shell Beach; section north of Pismo Beach looking toward Shell Beach.	N/D '49 p42
View looking northerly through Shell Beach toward San Luis Bay.	N/D '49 p43
Freeway looking northerly on Ontario Grade.	N/D '49 p43

**San Mateo Co.**

**Alpine-Portola Rd. [FAS Rt. 1048]**

Section near Ladera subdivision entrance.	J/A '51 p9
Section of Alpine Rd.	J/A '51 p58
Reconstructed section of Alpine-Portola Rd.	M/A '54 p40
Portola Rd. improvement at Dennis Martin Cr.	M/A '54 p41
North end of Portola Rd. reconstruction.	M/A '54 p42
Guard rail emphasizes the narrowness of this coast connection.	F '38 p1

**I-280 (Junipero Serra Fwy.)**

Knowles Ave Interchange section under construction, Daly City.	S/O '64 p36
Skyline Blvd parallel to San Andreas Lake, to be superseded by I-280.	S/O '64 p36
section under construction between Eastman Ave. and Orizaba Ave.	N/D '65 p19

**Rt. 1 [Rt. 56 ]; Ocean Shore Hwy.**

Winding, hazardous road which will be eliminated by new state highway.	Jun '37 p4
Section of scenic route which will become modern highway.	Jun '37 p5
Stretch of new highway with San Pedro Mt. in distance.	Jun '37 p5
Construction highway along face of cliff on which engineers constantly battle slides which plunge into ocean below.	Jun '37 p5
Looking down valley from Pedro Mt. Summit.	D '37 p1
Section of road typical of new Ocean Shore Hwy.	D '37 p1
Section 1-1/2 miles south of Rockaway Beach, old road visible on left.	D '37 p2
Section near intersection of county road with new Ocean Shore Hwy.	D '37 p2
Construction difficulty encountered on Pedro Mt. section.	D '37 p3
Pescadero Beach on coast across which a right of way has been secured for Rt. 1 [State Rt. 56].	Jul '40 p12
Three of the beautiful small ocean beaches on the San Mateo coast acquired for public use through right of way deal.	Jul '40 p13
Portion of Pebble Beach.	Jul '40 p13
Charming, crescent beach line of Arroyo de las Frijoles.	Jul '40 p13
Island lot just below Pescadero Beach which through right of way deal becomes public property together with strip of level shoreline.	Jul '40 p13
Ocean Shore Hwy. along beaches acquired for public.	
Dedication parade at Pescadero Creek Br. led by Native Daughters drill team.	S '41 p5

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES San Mateo Co., Continued**

Half Moon Bay Bypass on Rt. 1.	M/A '61 p68
Multi-lane highway which replaced outmoded types of roadway.	J/F '48 p34
Pacifica; section near Sharp Park Golf Course.	M/J '65 p38
Pacifica-Skyline Blvd. expressway under construction	M/A '58 p13
South end of freeway; Section near Thornton Bluffs.	M/A '58 p21
San Bruno; 40-ft. highway section, 1926.	J/F '48 p34
Whitehouse-New Years Creek section under construction.	M/A '61 p68; M/J '61 p13
<b>Rt. 35 [Rt. 5]; Skyline Blvd.</b>	
Grading operations from Edgemar Rd. to Rt. 35/Rt. 1 [Rt. 55/Rt. 56] junction in Daly City.	M/A '54 p7
Expressway improvement on Skyline Blvd. through San Mateo.	M/A '55 p6
Skyline Blvd parallel to San Andreas Lake, to be superseded by I-280.	S/O '64 p36
<b>Rt. 82 [US 101*; El Camino Real]</b>	
Atherton; widened section of US 101.	J/A '43 p8
Channelized division strip on improved section approaching Atherton.	J/A '43 p9
Widened avenue through Menlo Park.	J/A '43 p9
Colma; heavy traffic near on Feb. 14, 1926.	J/F '48 p34
El Camino Real in San Bruno, 1914; Same location, 1960.	J/A '60 i.cvr.
Widened section of El Camino Real between Millbrae and San Bruno near Tanforan Racetrack.	M/J '64 p41
<b>Rt. 92 (19th Ave.) [Leg. Rt. 105]</b>	
19th Ave. Fwy., planned route of from San Mateo-Hayward Br. and I-280	M/J '61 p18
Elevated freeway through San Mateo.	M/J '64 p40
Sand Hill Rd. before reconstruction; Sand Hill Rd. after improvement.	M/J '60 p61
<b>San Mateo (city)</b>	
Channelized intersection at Parrott Dr. and Alameda De Las Pulgas.	J/A '61 p42
Before/after views of improved curb, gutter, and driveway.	J/A '61 p42
E. Hillsdale Blvd. after improvement.	J/A '61 p43
<b>State Highway Contract No. 1 official party at ground breaking for start of construction, Aug 7, 1912.</b>	S/O '50 p78; J/A '52 p45
<b>US 101; Bayshore Fwy. [US 101-By.*]</b>	
Asphalt concrete pavement near Redwood City. San Mateo	M/J '45 p11
Bayshore project between Burlingame and San Mateo under construction.	N/D '46 p34
Construction of fills around P.G. & E. power poles.	N/D '46 p35
Construction of final subgrade.	N/D '46 p35
Riprap wall and adjacent fill.	N/D '46 p36
Aerial view of Bayshore Fwy looking north toward Sierra Point.	M/J '49 p5
Traffic congestion on old Bayshore Hwy. at Butler Road, South S.F.	M/J '49 p4
Completed section in southern San Mateo Co.	M/A '58 p1
Construction underway near San Mateo-Santa Clara Co. line.	M/A '58 p18
Construction in Redwood City.	M/A '58 p1
San Mateo section at 3rd. Ave. interchange.	M/A '54 p8
Burlingame section in vicinity of Peninsular Ave. interchange.	M/A '54 p8
Completed five-mile section between San Mateo and San Carlos.	J/A '55 p13
Completed section in San Carlos at 10th Ave. interchange.	J/A '55 p13
Completed section of Bayshore Fwy. at Holly St., San Carlos.	M/A '56 p7
Relocation in Redwood City near Harbor Blvd. interchange.	M/A '59 p9
Woodside Rd. expressway, bypassing downtown Redwood City.	M/J '65 p37
[*In 1964 US 101-By became US 101 (Bayshore Fwy.); US 101 became Rt. 82]	

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES, Continued**

**Santa Barbara Co.**

Casmalia-Santa Maria access road.	J/A '45 p22
Lompoc-Casmalia Rd.; grading operations on "Big Sand Cut" section of San Antonio Rd. east of Vandenburg Air Force Base.	J/F '64 p51
Lompoc-Casmalia Rd. at main gate of Vandenburg AFB.	J/F '64 p51
Montecito; Eucalyptus Ln.-San Ysidro Ln. showing break in curb at intersection.	Jan '38 p2
Westerly end of Montecito project at Olive Mill Rd.	Jan '38 p3
Rolled curb on parting strip.	Jan '38 p3
20-ft. asphalt concrete lane with concrete curbs and earth dividing strip.	May '38 p25

**Rt. 1; Lompoc-Santa Maria section**

Vandenburg AFB highway after improvement.	J/F '67 p33
Where cuts were necessary, slopes were made 4 to 1 to blend into terrain.	J/F '67 p34
Section through swamp area; Loop connection with realigned Rt. 1.	J/F '67 p34
Former borrow site, now part of natural landscape.	J/F '67 p34

**Rt. 154 (San Marcos Pass Rd.)**

Looking across headwaters of Cachuma Lake near north end of new highway.	M/J '64 p12
Summer traffic on old route at Cold Springs Canyon Inn.	M/J '64 p13
Vacation traffic on old road leaving Cachuma Lake.	M/J '64 p13
Looking south along new highway from floor of Santa Ynez Valley.	M/J '64 p14
At Paradise Rd. junction.	M/J '64 p14
Relocated highway near Cachuma Lake.	M/J '64 p17
Cut and Fill construction on new highway near top of San Marcos Pass.	M/J '64 p17
Section approaching Surf.	J/F '64 p52

**Rt. 166 (Cuyama Rd.)**

Clearing and grading for relocation along Cuyama River.	S/O '58 p26
Relocation due to construction of Twitchell Dam.	S/O '58 p28
Huge cut necessitated by relocation.	M/J '59 p18
Cut and fill work on section of realigned highway.	M/J '59 p19
Swamp-fill work on section of highway.	M/J '59 p19

Santa Barbara; Cliff Dr., paved with city's allocation of gas tax funds for streets.

Turnpike Rd., improved section north of US 101.

**US 101 [Rt. 2, Coast Hwy.]**

**Arroyo Quemado-Arroyo Hondo unit**

New lanes constructed for northbound traffic on left, existing roadbed serving southbound traffic on right.	J/F '50 p29
View looking westerly across Arroyo Quemado.	J/F '50 p30
Fill constructed across Arroyo Quemado for new northbound lane.	J/F '50 p30
View of embankment, existing bridges across Arroyo Hondo.	J/F '50 p30

Buellton Bypass near Zaca Creek Channel Change.

Aerial view of construction operations showing old and new highways in relation to Buellton.	J/A '65 p29
Buellton Bypass as seen from Santa Rosa Rd. Overcrossing.	J/A '65 p30
View from N. Buellton Overcrossing at Rt. 246/101 separation.	J/A '65 p30

Buellton, construction under way, and structures which were moved back  
to provide extra roadway.

Buellton-US 101/Rt. 150 junction freeway section.	S/O '48 p38+
	S/O '59 p31, 37

Carpinteria Expressway looking east toward 7th St. Overpass.

Section at Franklin Creek Br.; Section at Carpinteria Creek Br.	M/A '55 p42
	M/A '55 p43

Danger spot on heavily traveled section near Santa Barbara.

El Capitan Creek unit after reconstruction, showing old highway.	F '38 p12
	Jun '40 p8

Grade under construction east of El Capitan Cr.	Jun '40 p9
Grade on Coast Highway reconstruction.	Jun '40 p23

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Santa Barbara Co., Continued**

Elwood-Orella freeway section west of Santa Barbara.	S/O '59 p33, 35
Gaviota Pass section-- <i>See also SCENIC HIGHWAYS</i>	
Drawing of, ca. 1769; Gaviota Pass ca. 1950.	S/O '50 p9
Gaviota Pass, 1912.	S/O '50 p43
Gaviota Pass-Santa Inez River section	F '40 p22
Gaviota Pass-Buellton area, expressway under construction.	S/O '58 p17
Gaviota Pass-Santa Ynez River scenic portion, after realignment.	Jun '39 p26
Guadalupe; section in need of reconstruction north of Guadalupe.	O '38 p3
Los Alamos Bypass on US 101.	S/O '58 p27; J/F '59 p49
<b>Montecito</b>	
Divided 4-lane highway with planted dividing strip and 2 parallel service roads separated from general roadway.	O '38 p9
Montecito Pkwy. with outer highway along southerly side.	M/J '48 p9
Section of Montecito Pkwy.	M/J '48 p10
Montecito Pkwy looking east from La Vuelta Dr.	M/J '48 p11
Construction on Summerland section of Montecito Pkwy.	N/D '51 p54
<b>Nojoqui Canyon</b>	
New highway section under construction in Nojoqui Valley.	O '38 p23
Section of new highway through Nojoqui Canyon.	Jun '39 p9
Grading operations in progress at Nojoqui Summit.	M/A '51 p8
Nojoqui Grade showing inadequacy of existing roadway.	M/A '51 p9
Construction operations on Nojoqui Grade just south of summit.	M/A '51 p9
Nojoqui expressway section looking north toward Buellton.	J/A '56 p60
View of expressway looking south.	J/A '56 p60+
Orella-Canada del Refugio section before/after reconstruction.	Mar '42 p10+
San Marcos Pass Hwy. after improvement	S/O '50 p43
Curving section of San Marcos Pass Hwy. before improvement.	J/A '55 p45
<b>Santa Barbara (city)</b>	
Reconstructed section west of	O '41 p9
Rough graded section realignment west of Santa Barbara.	O '41 p11
Cut slopes being rounded prior to application of top soil.	O '41 p11
Top soil applied and left rough to let vegetation gain a foothold.	O '41 p11
Expressway under construction near Santa Barbara on US 101.	S/O '58 p25
Work in progress on additional lanes west of Santa Barbara.	N/D '61 p18
Section at Castillo St. undercrossing.	M/A '64 p2
Section at Anapamu pedestrian overcrossing	M/A '64 p4
Aerial view of US 101 through Santa Barbara.	M/A '64 p5
Mission Creek channel change paralleling the freeway.	M/A '64 p6
Construction near Mission Creek.	N/D '64 p18
<b>Santa Barbara Fwy.</b>	
Milpas St. intersection approaching Salsipuedes overhead structures.	J/F '49 p27+
View of freeway showing Montecito St. as outer highway.	J/F '49 p28
<b>Santa Barbara-Tecolote Canyon route</b>	
Channelization of Hollister Ave., with signal installation in progress.	M/A '47 p21
Completed relocation looking north.	M/A '47 p22
Looking north from San Jose Creek Br.	M/A '47 p22

## ROUTES, Continued

### Santa Clara Co.

- Almaden FAS expressway, completed section south of San Jose. S/O '60 p34  
 Gilroy; Monterey St. parking conditions, 1951; After improvements, 1955. M/J '55 p37
- I-280 (Junipero Serra Fwy.)**  
 Section near Sarasota Ave. Interchange. M/J '64 p43  
 Completed Sarasota Ave. portion near San Jose. S/O '64 p37  
 Completed freeway unit showing Saratoga Ave. interchange. N/D '64 p63  
 Completed section of I-280 west of San Jose near Wolfe Rd interchange. M/J '65 p39  
 I-880 [Rt. 17]; section of Nimitz Fwy. through San Jose. N/D '60 p71  
 Lexington Dam reservoir, realigned highway around. M/A '55 p34
- Rt. 1, Waddell Bluffs unit**  
 Bulldozer crews on Waddell Bluffs job. S/O '48 p8  
 Early stages on construction on Waddell Bluffs project. S/O '48 p9  
 Waddell Bluffs Hwy. before paving and striping. S/O '48 p10
- Rt. 17 [Rt. 5]; Los Gatos-Santa Cruz Hwy.--See also EROSION CONTROL**  
 San Jose-Los Gatos freeway construction near Saratoga Ave. Interchange. M/A '58 p19  
 Scott's Valley link, grading construction work on. Apr '37 p3  
 Section of highway at same point showing width of pavement. Apr '37 p3  
 Looking toward Camp Evers on newly finished highway. Apr '37 p3  
 Los Gatos-Inspiration Point link, heavy grading equipment in operation on Jun '38 p4  
 Section of old, winding Los Gatos-Santa Cruz route. Jun '38 p5  
 Portion of new road, shown under construction. Jun '38 p5  
 Official group at dedication. Jun '38 p6  
 Oaks Road-Inspiration Point unit, heavy grading underway on realignment. O '38 p13  
 Clearing operations for large fill across deep ravine on new route. O '38 p5  
 Group at "log-cutting" ceremony at dedication. Jul '39 p24  
 Frank W. Clark delivering address at dedication and opening. Jul '39 p25  
 New 4-lane highway, with old alignment at right. Jul '39 p28
- Oaks Road-Los Gatos [final] unit**  
 Official group at highway dedication. S '40 p10  
 Wide, sweeping curves on completed highway unit. S '40 p11
- Los Gatos Bypass**  
 Completed first unit showing grading in progress for future extension. M/A '57 p8  
 Bypass near Main St. Br. showing reconstruction of Los Gatos Cr. M/A '57 p8  
 Section of new Los Gatos highway, Charles St. connection. M/J '57 p47  
 Los Gatos; Rt. 9 [Rt. 42]-Bascom Ave. section M/A '59 p9  
 Construction near Stevens Creek Rd. Interchange in San Jose. M/A '59 p9  
 Section at Stevens Creek Rd. Interchange, San Jose. M/A '60 p25
- Rt. 82 [US 101\*]**  
**Bay Shore Hwy.**  
 San Jose section, official group at ribbon-cutting. Jul '37 p19  
 Extension at Ford Rd. where it joins Bayshore Hwy. [US 101]. J/A '47 p8  
 Approach to Ford Rd. Interchange at connection with Bayshore Hwy. J/A '47 p9  
 Section of Bayshore Hwy. on outskirts of San Jose. J/A '47 p9  
 Bayshore Hwy. at Santa Clara Ave. J/A '47 p9
- Coyote-Morgan Hill-Llagas Creek unit widening**  
 Finishing machine spreading leveling course at end of surface run. Aug '38 p16  
 Business section in Morgan Hill showing buildings set back to promote highway widening. Aug '38 p17  
 Shovel removing surplus excavation while trucks place borrow material along widened section of roadway. Aug '38 p17  
 Section near Morgan Hill, Santa Clara Co. Jul '39 p11

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Santa Clara Co., Continued**

Gilroy; divided highway construction on improved section of Rt. 82 [US 101].	Jan '42 p17
Pajaro River section	
Realignment under construction.	Aug '41 p18
Typical new roadway north of Pajaro River near Sargent.	Jan '42 p14
Stretch of new divided highway at Sargent.	Jan '42 p16
Rt. 85 [Stevens Creek Fwy.]	
Under construction near junction with Rt. 237.	M/J '65 p40
Section of Rt. 85; Rt. 85 through Mountain View.	J/A '66 p45
<b>Rt. 152; Pacheco Pass</b>	
Realignment showings cuts and fills eliminating curves.	F '39 p11
Several of 31 sharp curves on Pacheco Pass highway being eliminated.	F '39 p11
Realigned portion of Rt. 152 through Pacheco Pass.	S '39 p7
Section of previous construction on Pacheco Pass Hwy. with the new alignment on right and old roadway on left.	M/A '51 p34
Benching of cuts and embankment toe protection of new highway.	M/A '51 p35
Contrast between new construction and old alignment.	M/A '51 p36
Demolition charges being set during bypass construction.	N/D '64 p22
Fill for Pacheco Pass expressway.	N/D '65 p15
Pacheco Pass highway after relocation.	N/D '65 p67
Rt. 237; cleared right-of-way near Dana Rd. Overcrossing.	M/J '64 p44
San Jose	
Lincoln Ave. before improvement; Same location after.	S/O '55 p48
Lincoln Ave. between Brace and Minnesota before improvement.	S/O '55 p49
Same location after.	S/O '55 p49
Aerial view of greater downtown area.	J/F '67 p23
<b>US 101* (Bayshore Fwy.) [US 101-By]</b>	
Construction work on Bayshore Fwy.	M/A '46 p3
Terra-Cobra with caterpillar dozer-pusher excavating rocky material.	M/A '46 p4
Completed rough grade in sidehill cut.	M/A '46 p4
Construction near Moffett Field.	M/A '59 p9
Palo Alto section near University Ave. interchange.	M/A '59 p1
Palo Alto; section at Willow Rd. Interchange.	M/A '60 p19
Looking westerly across University Ave. Interchange.	M/A '60 p19
Bayshore Fwy. through San Jose.	M/J '61 p10
Bayshore Fwy. under construction south of San Jose.	M/J '61 p10
Construction in Mountain View area near Moffett Field.	M/J '61 p10
US 101 [US 101-By] east of San Jose near McKee Rd. interchange.	M/A '57 p6
Completed interim project between Llagas Cr. and Morgan Hill.	M/A '57 p8
[*In 1964 US 101-By became US 101 (Bayshore Fwy.); US 101 became Rt. 82]	
<b>Santa Cruz</b>	
Mt. Hermon Rd. between Rt. 9 [Rt. 116] and Rt. 17 after improvement. [FAS]	N/D '54 p31
Rt. 35 [Rt. 55]; Skyline Blvd. route near Woodwardia in Santa Cruz.	S '38 p2
Rt. 1 [Rt. 56]	
Cabrillo Hwy. at interchange with State Park Dr.	M/J '64 p46
Davenport-Waddell Cr. unit, sections of new highway.	O '39 p11
Laguna Creek improvement near north end of job.	J/A '54 p12
Improved roadway looking south toward Laguna Creek fill.	J/A '54 p13
Ocean Shore Hwy. relocation under construction north of Santa Cruz.	May '39 p16
Section of old, narrow winding highway on coast north of Santa Cruz.	May '39 p17
Equipment widening grade; new roadbed along ocean bluffs.	May '39 p17



# **ROUTES Santa Cruz Co., Continued**

Rob Roy Junction-Santa Cruz Fwy.	
Deep excavation work in progress near Soquel.	N/D '48 p9
Gov. Earl Warren, Col. Jno. H. Skeggs, Senator H. Ray Judah, and George T. McCoy on speakers platform at dedication.	N/D '49 p1
Aerial view of Santa Cruz Fwy near Aptos.	N/D '49 p3
Aerial view of freeway at Soquel Rd. and Paul Sweet Rd. interchange.	N/D '49 p4
Gov. Warren with drum majorettes and high school band members at freeway dedication.	N/D '49 p6
Section of freeway between Rob Roy Junction and Santa Cruz.	S/O '50 p100
Rob Roy-Watsonville Hwy. under construction.	Jul '41 p19
Stretch of Watsonville-Rob Roy highway.	N '42 p12
3-lane highway between Watsonville and Rob Roy Junction.	N '42 p13
Watsonville Bypass, first phase of construction completed.	M/J '65 p41
<b>Rt. 17 [Rt. 5]</b>	
Completed Rt. 17 entrance into Santa Cruz near Ocean St. interchange.	M/A '57 p8
Los Gatos-Santa Cruz Hwy.-- <i>See Santa Clara Co.</i>	
Rt. 17 at Pasatiempo Interchange.	M/A '60 p30
Rt. 17 near Santa Cruz.	M/J '61 p14
<b>Shasta Co.</b>	
Dersch Rd. [FAS 1350], aerial view of country through which it passes.	J/A '66 p38
<b>I-5 [US 99, Rt. 3]</b>	
Anderson before/after construction of divided highway.	S/O '51 p10
<b>Anderson-Cottonwood unit</b>	
4-lane highway on north side of Cottonwood Hill, Anderson at far end.	M/A '49 p34
Aerial view showing old road on left and new highway on right.	M/A '49 p35
4-lane divided highway into Cottonwood.	M/A '49 p35
Highway entering Anderson.	M/A '49 p36
Antler Br section; equipment grading for relocation through mountains north of Shasta Dam at south end of Antler Br.	Apr '41 p14
Grading down steep mountainside for Antler Br. approach.	Apr '41 p15
Bass Hill-Mountain Gate section under construction.	N/D '55 p48
Bass Hill-O'Brien Summit relocation underway.	Jun '40 p6
Heavy equipment at work excavating, grading, and constructing fills for highway relocation north of O'Brien.	Jun '40 p25
Cottonwood; I-5 freeway near Cottonwood.	J/F '65 p35
Approaching 4th St. Interchange, 1st. St. Overcrossing, Cottonwood Creek Br. and Overhead near town of Cottonwood.	J/F '65 p36
Lake Britton-Burney Falls; realigned section on Sierra Way.	May '40 p24
La Moine, relocated section north of.	N '39 p4
Grading operations, and building fill over large culverts.	N '39 p5
Redding; north entrance to city at night; Same location, day.	M/A '58 p7
Section north of, designed with a wide, traversable dividing strip.	M/A '56 p44
Sharp alignment, steep bridge approach, blind vertical, and narrow bridge at Redding city limits.	Jul '38 p1
3-way channelization project near Redding.	O '41 p23
Section south of Redding before and after improvement.	S/O '51 p56
<b>Sacramento River Canyon section</b>	
Typical highway construction ca. 1928.	M/J '56 p33
4-lane divided highway near south end of canyon, north of Redding.	M/J '56 p34
Section near Castilla before improvement.	M/A '58 p7
Completed section of expressway in Sacramento Rvr. Canyon.	N/D '59 p12, 14

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Shasta Co., Continued**

**Shasta Dam relocation**

Highway relocation work south of Shasta Dam.	Jun '40 p7
Section relocated around Shasta Lake site near Black Oak Summit.	F '43 p3
Section relocated around Shasta Dam Lake site near O'Brien Summit.	F '43 p2
Reconstructed highway around Shasta Lake.	M/J '56 p35
Vollmers; old highway, showing poor alignment and sight distance.	J/F '57 p25
Completed section of new freeway.	J/F '57 p25
Redding; I-5 [US 99]/Rt. 44 intersection before/after improvement.	S/O '51 p9
Channelization intersection.	N/D '59 p15

**Rt. 44 [Leg. Rt. 20]**

Feather Lake Hwy., improved section of	N/D '61 p44
Section at north entrance to Lassen Volcanic National Park.	N/D '59 p16
Rt. 44 expressway at Stillwater Rd.	M/J '65 p20
Rt. Expressway east of Cow Creek.	M/J '65 p20
Curve on old highway.	M/J '65 p20
Rt. 44 expressway near intersection with Deschutes Rd.	M/J '65 p22
Rt. 89 between Burney and Lassen Park boundary.	M/A '58 p7

**Rt. 299**

Construction on Hatchet Mountain section.	N/D '51 p55
Improved section east of Hatchet Mt. Summit.	M/A '60 p33
Snow removal operations on summit.	M/A '60 p34
Normal winter snow conditions between Montgomery Cr. and Burney Valley.	M/A '60 p34
West from Burney Valley showing nearly completed expressway.	M/A '60 p69
Rough grade completed on east side of Hatchet Mt.	M/A '60 p69
Partly completed embankment across Whiskey Creek Arm.	M/J '61 p52
Shasta-Schilling highway under construction.	N/D '47 p7
Stretch of Shasta-Schilling highway.	N/D '47 p8
Deep cuts on highway, benched to remove unstable material.	N/D '47 p8

**Sierra Co.**

I-80 [US 40] construction near Floriston.	J/A '58 p9
---	------------

**Rt. 49 [Rt. 25] Yuba Pass Hwy.**

Nevada City-Downieville unit; heavy rock excavation on realigned section.	M/J '46 p2
Section of new highway between Nevada City and Downieville.	M/J '46 p3
Improved section west of Downieville.	J/A '58 p8
Sierra City-Bassetts unit, expressway	
Expressway between Sierra City and Bassetts	J/A '63 p19
Section of improved Yuba Pass Hwy.	M/J '65 p2
Section of old highway before widening and improvement.	M/J '65 p2
Widened roadway at Manzanita.	M/J '65 p3
Aerial view of project and surrounding area.	M/J '65 p4
Big Springs safety rest area.	M/J '65 p5

**Siskiyou Co.**

**I-5 [US 99]**

Completed section over Siskiyou Mts. built by Oregon and California.	D '40 p23
Old section of I-5 [US 99]; Stretch of realigned I-5 [US 99].	J/F '50 p13
Black Butte realignment between Shasta City and Weed.	S/O '51 p6
Section of Black Butte realignment looking south from Weed.	S/O '51 p7
Ribbon-cutting participants at dedication.	S/O '51 p7
Section of realignment looking south toward Black Butte.	S/O '51 p64

# **ROUTES Siskiyou Co., Continued**

Dunsmuir business district before improvement.	S/O '51 p2
Curve on roadway near Dunsmuir.	S/O '51 p3
Completed expressway north of Dunsmuir.	M/A '58 p6
Section of new expressway on approaching Castle Crag.	M/A '58 p7
Aerial view of Dunsmuir with drawing of future interstate freeway.	M/A '58 p16
Dunsmuir Fwy., excavation operation on "Big Fill" section.	J/A '60 p16
"Big Cut" section north of Dunsmuir.	J/A '60 p16
Mt. Shasta; I-5 near interchange at Lake St.	N/D '64 p65
Completed section of I-5 freeway near Mt. Shasta city.	M/A '65 p57+
Aerial view of completed freeway showing Lake St. overcrossing.	M/A '65 p58
I-5 [US 99]-US 97 Cut-off [FAS Rt. 1166].	M/A '55 p38
I-5 [US 99]-US 97 Cut-off heading toward Mt. Shasta.	M/A '55 p39
Sheep Rock near westerly terminus of I-5 [US 99]-US 97 Cut-off.	M/A '55 p39
Obsolete alignment and inadequate 15-ft. pavement [unidentified route].	Jul '38 p3
<b>Rt. 3 [Rt. 82], Scott Valley Hwy.</b>	
Entering Ft. Jones; Realigned section southwest of Yreka.	M/A '58 p13
New highway over Scott Mt. between Yreka and Ft. Jones.	M/A '58 p15
New highway and bridge on Rt. 82 north of Ft. Jones.	N/D '59 p17
FAS Rt. 1089 unit [Oregon Trail], improved north of Callahan.	J/F '60 p36
FAS Rt. 1089 unit [Oregon Trail], improved at south end of Scott Valley.	M/A '60 p45
Rt. 139 [Rt. 210, California-Oregon State Line Hwy.] west of Tulelake.	N/D '59 p17
<b>US 97</b>	
Cougar-Macdoel section of highway.	D '38 p19
Route looking south across Wild Horse Mesa.	D '38 p19
Tractors equipped with big rubber tired wheels and weighted bags of cement rolling soil-cement base construction.	D '38 p20
Looking south on US 97 from Oregon line.	M/A '55 p22+
Highway parsing through cut near railway tunnel.	M/A '55 p22+
Section of US 97 north of Weed.	N/D '59 p13
<b>Solano Co.</b>	
Access road project north of Vallejo.	M/J '45 p10
Tennessee St. signalized intersection.	J/A '58 p16
<b>I-80 [US 40]</b>	
Davis-Dixon cut-off	
Typical section of 4-lane divided highway, partially completed.	O '42 p10
Dixon; portland cement paved section near Dixon.	M/J '47 p10
American Canyon section.	S/O '48 p2
View on American Canyon section with added lanes on left.	M/A '50 p7
Building embankment to widen I-80 [US 40] at American Canyon.	S/O '61 p6
Construction on I-80 [US 40] at American Canyon interchange.	S/O '61 p9
Wagon drill preparing to blast for roadway excavation and fill.	S/O '61 p9
Cordelia; section near I-680 [Rt. 21] interchange.	S/O '61 p10
At junction of I-680 and Benicia Rd. near Cordelia.	J/F '65 p48
Approaching Green Valley Rd. near Cordelia.	J/F '65 p49

# **ROUTES Solano Co., Continued**

Fairfield Bypass under construction.	J/A '49 p45
Aerial view of project looking toward Fairfield.	N/D '50 p45
Aerial view of construction between Fairfield and the Napa Wye.	N/D '50 p46
Aerial view of Fairfield Bypass.	N/D '50 p47
View on Fairfield bypass showing westerly approach to Fairfield.	M/A '50 p5
Section of Fairfield bypass near east entrance to Fairfield.	M/A '50 p6
Section at Abernathy Rd. interchange approaching Fairfield.	S/O '61 p10
Section near Travis Blvd overcrossing.	J/F '65 p49
Rio Vista; Main St. prior to widening and reconstruction; Main St. after.	S/O '65 p10
Vaca Valley route [then Rt. 6-7] in 1937.	J/F '65 p50
<b>Vacaville Bypass</b>	
End of completed pavement where existing highway enters city on curve.	F '37 p5
Street passing two school houses on old alignment.	F '37 p5
Short radius "S" curves, schoolhouse in background.	F '37 p5
Large cut in new alignment.	F '37 p5
Newly completed Vacaville Bypass.	Jun '37 p15
<b>Vacaville vicinity--See also ROADSIDE BUSINESSES &amp; BYPASSES</b>	
Section of 20-ft. Portland cement concrete pavement near Vacaville.	May 38 p14
Main St., Vacaville ca. 1890s.	S/O '50 p94
Section of highway near Vacaville.	Jul '37 p10
Vibrator spreader attached to tampering and kneading machine.	J/A '46 p12
Cut widening at south end of project near Vacaville.	J/A '46 p13
Crew placing headers while traffic uses the existing road.	J/A '46 p13
Resurfaced section near Vacaville.	J/A '52 p51
4-lane divided highway near Vacaville.	J/F '47 p26
Widening project near Vacaville at intersection with Cherry Glen Rd.	M/A '50 p6
Widening project west of Vacaville.	M/A '50 p7
Grading two additional lanes for 4-lane divided highway near Vacaville.	J/A '51 p63
Section near I-505 junction.	N/D '64 p18
Nut Tree; entrance to outer highway off I-80 [US 40].	J/A '51 p63
Entrance to Nut Tree before, showing haphazard parking movements.	J/F '53 p34
Entrance to Nut Tree after, with controlled access.	J/F '53 p35
Section approaching Nut Tree.	J/F '65 p49
Grading for outer highway near Vacaville-Dixon P.G. & E. substation.	J/A '51 p64
Construction near Meridian Rd overcrossing and P.G. & E. substation.	J/F '65 p51
<b>Vallejo</b>	
Constructing retaining wall between main highway and outer highway.	J/A '48 p8
Rough grading near Fleming Ave.; Rough grading near Tennessee St.	J/A '48 p9
Excavating for entrance to underpass at 4th St.	J/A '48 p10
Section near I-80/I-780 [US 40/Rt. 74] intersection.	S/O '57 p63
Looking northerly across Lake Chabot where frontage road for Vallejo freeway project is to be constructed.	S/O '57 p63
Section through Vallejo near Tennessee St. Interchange.	J/A '59 p6
I-80 [US 40]-Benicia Rd. intersection prior to construction of freeway.	J/A '61 p25
Signalized intersection of I-80/Benicia Rd., 1943.	J/F '65 p48
I-80 [US 40]-Georgia St. intersection before freeway; Same section after.	J/A '61 p26
<b>Rt. 12; Suisun-Denverton Fwy.</b>	
Tideland area at northerly end of Suisun Bay which freeway will traverse.	J/A '57 p31
Easterly end of project before improvement.	J/A '57 p31
Relocation work near Rio Vista Br. across the Sacramento River.	J/A '59 p5
Rt. 29; Vallejo-Napa Hwy. where Bassalt Co. subway crosses under highway.	S/O '44p19+
Rt. 37 [Rt. 48]; detour under construction to right of old Rt. 48.	S/O '61 p75

## ROUTES, Continued

### Sonoma Co.

- Healdsburg road, 1859. M/J '64 p3  
Rt. 12: Blind curves on Guerneville-Monte Rio route along Russian River. S '38 p2  
Rt. 37  
Shoulder widening on Sears Point Cut-off from excess excavation. J/A '50 p40  
Junction of Black Point and Sears Point Cut-offs on relocated line. J/A '50 p40  
Rt. 116 [Russian River Hwy.; Gravenstein Hwy.]  
Old Northwood Park-Guerneville Hwy. showing curves and grades. Jul '39 p4  
Backfilling bulkheads with porous river gravel for new highway. Jul '39 p5  
Steel piles and treated timber bulkheads for construction near Monte Rio. Jul '39 p27  
Realigned highway between Guerneville and Monte Rio along the river. O '39 p14  
L.G. Hitchcock (CHC) about to use ax to sever redwood barrier. O '39 p14  
Beautiful vistas through the redwoods greet the eye on new highway. O '39 p15

### US 101

- Asti Bypass under construction. M/J '64 p47  
Cloverdale; slipout-damaged section along Russian River. J/A '64 p24  
Geyserville freeway section. M/J '65 p42  
Healdsburg, construction mishap near 1914. J/A '64 p25  
Healdsburg Bypass near intersection with old highway at Grant. M/A '60 p29  
Aerial view of Healdsburg Bypass under construction. N/D '60 i.cvr.  
Construction underway south of Healdsburg Bypass. M/J '61 p7  
Healdsburg Bypass near twin bridges across Russian Rvr. M/J '61 p7  
Marin-Sonoma Hwy.; San Rafael-Novato-Petaluma unit  
C.H. Purcell and guests at Marin-Sonoma Rt. dedication. S/O '47 p5  
Petaluma, poorly aligned section near. F '38 p12  
Redwood Hwy. near Petaluma, 1916. J/A '64 p27

### Petaluma Bypass

- Aerial view of Petaluma showing proposed route of bypass. M/A '55 p15  
Old route through congested main Street in Petaluma. M/J '55 p8  
Constructing embankment; Shovel excavating dirt. M/J '55 p9  
Bypass looking northerly; Looking southerly from Denman Flat. M/A '57 p18

### Santa Rosa Bypass

- Jno. H. Skeggs addressing audience at dedication ceremonies. M/J '49 p61  
Santa Rosa Fwy. at Sebastopol Ave. M/J '49 p61  
Aerial photo taken during grading operations, showing new freeway in comparison with old route through town. M/J '49 p62  
Santa Rosa Ave. looking north at southerly intersection. M/J '49 p63  
Santa Rosa Fwy. looking south at intersection of Ridgeway Ave. M/J '49 p63  
Santa Rosa, section of US 101 through. M/J '65 p43  
Valley Ford-Bodega Bay Hwy. [FAS Rt. 777] section prior to improvement. M/J '57 p5, 7  
Same section after improvement. M/J '57 p6+  
Improved sections of route. M/J '57 p6+

### Stanislaus Co.

- East Modesto Rd. [FAS 1226] looking south from Stanislaus River. S/O '58 p29  
View of East Modesto Rd. showing bridge across Stanislaus Rvr. S/O '58 p30  
FAS Rt. 912 paralleling Rt. 99 near Empire, looking southeast. N/D '48 p19  
Maze Rd. between Modesto and Tracy, a boon to agriculturists. Jul '37 p17  
McHenry Ave. near Orangeburg intersection in Modesto before/after widening. M/J '60 p58+  
McHenry Ave. during construction. M/J '60 p59

California Highways and Public Works  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Stanislaus Co., Continued**

**Rt. 99 [US 99]**

**Modesto-Salida divided highway**

Roadside trees preserved on separation strip north of Modesto.

May '39 p6+

Divisional island on new section of divided highway.

May '39 p7

Guard rail on new section near Modesto.

May '39 p7

4-lane divided, and outer hwy. on left approaching Salida from south.

N/D '47 p23

**Modesto-Keyes divided highway unit.**

O '41 p15

Modesto-Ceres Bypass crossing over 9th St. [old US 99] and 7th St.

S/O '65 p6

Freeway at North St. near Ceres Park; Freeway at Crows Landing Rd.

S/O '65 p7

Traffic congestion on 9th St. [old US 99] through Modesto.

S/O '65 p8

Detour during freeway construction.

S/O '65 p8

Resurfacing 9th St. [old US 99] in Modesto.

S/O '65 p9

Aerial view of new Modesto-Ceres Fwy.

S/O '65 p9

Turlock; concrete pavement section south of.

J/A '52 p51

Typical mid-valley section of Rt. 99 expressway near Turlock.

S/O '54 p2

Rt. 120 at Jones Curve east of Oakdale, after relocation.

J/A '58 p20

**Sutter Co.**

Drescher Blvd. between Rt. 70 [Rt. 24] and Nicolaus, after improvement.

J/A '59 p53

El Centro Blvd. [FAS Rt. 926.], before/after views of.

M/A '50 p49

Live Oak; 15th St., after improvement.

J/A '60 p50

Rt. 20 [Rt. 15]; Tahoe-Ukiah lateral realignment.

Jan '38 p13

Official group at dedication of Sutter Bypass link of Tahoe-Ukiah Hwy.

Jan '38 p13

Rt. 70-99 after widening and installation of left-turn lane.

S/O '65 p18

**Tehama**

I-5 [US 99]; relocated section north of Red Bluff.

Mar '41 p17

One of sharp curves eliminated by relocation of section north of Red Bluff.

O '40 p16

I-5 between Red Bluff and Shasta Co. line.

N/D '64 p17

Narrow oiled earth road.

Jul '38 p3

Rt. 36; Official party at "log sawing" ceremony.

N/D '57 p53

Four-lane section just south of Lassen Volcanic National Park.

N/D '59 p16

2-lane highway on Rt. 36, 31 miles west of Red Bluff.

N/D '59 p18

**Trinity Co.**

14-ft. roadway with many hairpin turns on grade.

Jul '38 p3

Rt. 3 [Rt. 82, FAS Rt. 1089], unimproved section south of Carrville.

M/A '60 p63

Rt. 299W [Rt. 20; Trinity Lateral]

Dirt roads on route, ca. 1938.

F '38 p14

Sayler-Burnt Ranch section; grading operations.

J/A '47 p15

Grading operations on rocky section east of Cedar Flat.

J/A '47 p15

Nearly completed section across Gray's Bluff.

J/A '47 p15

Winding, narrow section near Sayler before improvement.

J/A '47 p15

Trinity Lateral.

M/J '50 p45

Weaverville-Douglas City portion, heavy grading for relocation.

M/J '57 p59

Main street of Weaverville after improvements.

M/J '57 p61

Construction on Rt. 299.

M/A '58 p9

Improved section of US 299 east of Weaverville.

M/A '58 p10

Section south of Weaverville in 1914; Same location, 1958.

M/J '60 i.cvr.

Weaverville-Junction City Hwy.

Hydraulic giant working on highway excavation in Oregon Gulch.

Aug '39 p3

View from summit of Oregon Mt. looking down on future highway grade.

Aug '39 p3

Partially graded highway approaching hydraulic cut through Oregon Mt.

Aug '39 p4

Roadway in Oregon Gulch built with hydraulic tailings.

Aug '39 p5

Hydrauliclicking operations on Oregon Hill.

M/J '50 p21

## ROUTES, Continued

### Tulare Co.

Cherry Ave. in Tulare after improvement. J/F '52 p43

#### Rt. 65 (Orange Belt Hwy.)

Section of new link entering the city of Porterville. Jul '38 p8  
Gathering at ribbon cutting ceremony. Jul '38 p9  
Exeter link portion after improvement. Aug '39 p25  
Equipment at work on Ducor Cut-off near Porterville. Jul '40 p22  
Completed Ducor Cut-off; Looking northerly into big cut. Jul '40 p23  
Porterville Bypass on Rt. 65. S/O '58 p42

#### Rt. 99 [US 99]

Earlmarl Bypass. S/O '58 p39

#### Tulare Bypass

Aerial view of bypass. J/F '54 p17; M/J '56 p39  
Official party at ribbon cutting ceremony. J/F '54 p18  
Tulare Bypass looking north. J/F '54 p19  
Traffic congestion in Tulare before completion of bypass. J/F '54 p20  
Looking east on Rt. 63 to Lindsay, which is carried over bypass. J/F '54 p34  
South end of bypass; Bypass near Paige Rd. overcrossing. J/F '54 p34  
Bypass near Rt. 137 [Rt. 134] interchange. S/O '54 p1  
Completed structures and grading at Visalia Airport north of Tulare. S/O '54 p3  
Tipton Bypass. S/O '58 p38

Rt. 190; relocated section at bridge across Tule Rvr. near Porterville. S/O '59 p8

Pack mules working on freeway fencing job along Rt. 190. M/A '60 p61

#### Rt. 198; Visalia [Rt. 10]

Mineral King Ave. divided highway. Jun '42 p10  
Large, beautiful trees saved in construction of division strip. Jun '42 p10  
Curbed central island separating new 4-lane section from existing road. Jun '42 p11  
Easterly section of improvement. Jun '42 p11  
Mineral King Ave. handling heavy flow of traffic without congestion  
due to elimination of parking. J/A '50 p6

### Tuolumne Co.

#### Rt. 49 (Mother Lode Hwy.)

Section of realigned highway into Jamestown. S '41 p19  
Mother Lode vein exposed by highway cut. S '41 p19

#### Rt. 108

Heavy traffic on unimproved Twain Harte Grade section near Hunt's Camp. J/F '64 p23  
New highway fitted to sidehill above old road. J/F '64 p23  
Improved section at Soulsbyville Rd. near Mono Vista. J/F '64 p24+

#### Rt. 120 [Leg. Rt. 40]; Big Oak Flat Hwy.

Priests Grade, showing curve correction. M/J '54 p40  
Priests at top of Priests Grade county road. M/J '54 p41+  
Priests to Moccasin Creek, county road to Courterville. M/J '54 p41+

#### Rt. 132 [Rt. 110], dirt road section, ca. 1938.

F '38 p14

Tuolumne-Sonora Rd. at Wards Ferry Rd., after improvement. M/A '58 p22

### Ventura Co.

#### Rt. 1 [US 101 -Alt.; Coast Route Hwy.]

Section at Trancas Beach. Jul '39 p15  
Section near Big Sycamore Canyon. Jul '39 p14  
Section looking toward Oxnard near grade separation underpass with SP RR. J/A '52 p24  
Section through Montalvo looking toward Santa Clara River Br. showing  
business development along old highway. J/A '52 p24  
Completed section of highway through Montalvo. J/A '52 p24, 26



*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Ventura Co., Continued**

Looking toward Ventura along completed highway.	J/A '52 p25
El Rio channelized intersection between US 101 and Rt. 1 [US 101-Alt.].	J/A '52 p25
Section through Oxnard at intersection with Rt. 34 [Rt. 153] to Pt. Hueneme.	J/F '57 p13
Right-of-way clearing in progress from Oxnard to Collegas Creek.	J/F '57 p13
Rt. 33; Ojai Fwy. [US 399]	
Completed Ojai Fwy. near city of Ventura and Ventura Rvr.	J/F '57 p14
<b>Rt. 118 (Simi Valley Fwy.)</b>	
Planned route through Santa Susana Pass.	M/J '65 p50
Simi Valley girls detonating dynamite charge at ground-breaking.	S/O '66 p30
Blast on mountainside which signaled beginning of celebration.	S/O '66 p31
Color guard of Ventura Co. Independent Riders at celebration.	S/O '66 p32
Honored guests arriving by Conestoga Wagon.	S/O '66 p32
Director of PW John Errca at ground-breaking.	S/O '66 p33
New high school built in valley.	S/O '66 p35
Tapo Canyon, showing transition area between housing and agriculture.	S/O '66 p34+
Simi Valley High School football team at practice.	S/O '66 p34+
Construction work for new freeway, showing proximity to old route.	S/O '66 p35
<b>Rt. 126 [Rt. 79]</b>	
Newly surfaced highway between Santa Paula and Sespe Ranch.	O '37 p12
Stretch of new highway between Sespe Ranch and Fillmore.	O '37 p12
Piru Creek-Los Angeles Co. line unit; portions of old and new road on realignment, eliminating curves between Castaic and Ventura.	Apr '42 p7
Section under construction northward from Satcoy to Santa Paula.	M/A '64 p22
Short sight distance and curves on highway near Santa Barbara Co. line.	D '38 p3
Tortuous alignment on road near Santa Paula.	F '38 P14
<b>US 101; Ventura Fwy.</b>	
Completed section through Camarillo.	J/F '56 p64
Conejo Grade section construction.	J/F '58 p9; M/A '58 p30+
Construction in progress in city of Ventura.	M/A '61 p21
Clearing operations and construction for freeway through Ventura.	N/D '61 p67
Completed Ventura Fwy. through city of Ventura.	M/A '64 p25
Section at Santa Barbara Co. line.	M/A '64 p25
<b>US 101 [Rt. 2, Coast Hwy.]</b>	
Camarillo Fwy. just prior to dedication in March, 1954.	J/A '54 p1
Central Ave-Santa Clara River unit	
Construction in vicinity of Rose Rd., old highway used as frontage road.	M/J '55 p59
Nearly completed section showing eucalyptus windbreak.	M/J '55 p59
<b>Conejo Grade section</b>	
South side of Conejo Summit looking west toward Oxnard and Ventura, showing existing highway, and realigned route in left foreground.	Jan '37 p21
Conejo Summit-Conejo Creek section after realignment.	Jan '37 p21
Transportation Pageant at dedication.	May '37 p9
Dedication ceremonies, showing new alignment and old highway.	May '37 p9
Deep cut in section of improved roadway.	May '37 p9
New highway looking north toward Camarillo.	May '37 p9
Early vintage Cadillac plowing through mud of unpaved US 101 ca. 1912.	J/F '61 p3
Little Sycamore Canyon section looking toward L.A. Co.	M/J '55 p34
Channelization lane for Yerba Buena Road.	M/J '55 p34
Point Mugu with its point cut off by a safe modern highway.	O '40 p12
Blasting and excavation at cut through to Point Mugu.	O '40 p13
Old road around ocean end of mountain.	O '40 p13

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**ROUTES Ventura Co., Continued**

**Seacliff-Mussel Shoal unit**

Borrow pit and belt conveyor at westerly end of project.	J/F '49 p56
Left half of roadway to approximate final grade.	J/F '49 p57
Timber causeway near Mussel Shoal ca. 1926 before it was dismantled.	S/O '49 p11
Same location Aug., 1949 showing completed 4-lane divided highway and streamlined train running parallel to roadway.	S/O '49 p11
Section near Seacliff, showing storm damage of Oct. 18, 1934.	S/O '49 p11
Same location in Aug. 1949 showing 4-lane divided highway.	S/O '49 p11
Section looking toward Seacliff oil wells, showing storm damage of March 1, 1941.	S/O '49 p13
Same location after Oct. 18 1934 storm damage.	S/O '49 p13
Same view in Aug. 1949 showing completed divided highway.	S/O '49 p13
US 101 just south of Ventura-Santa Barbara Co. line, 1912.	M/A '60 p73
Same section, 1959.	M/A '60 p73

**Yolo Co.**

Horse, horseless-carriage traffic on Winters-Davisville [Davis] Rd., early 1900s.	S/O '50 p73
I-5W under construction through farm land.	M/I '61 p39
<b>I-80 [US 40]</b>	
Davis; grading operations for four traffic lanes and division strip.	F '41 p25
Looking toward Davis from realigned section south of State Nursery.	Jul '41 p8
Resurfacing material windrowed in center of old highway from point near State Nursery.	Jul '41 p9
Looking toward Davis, State Nursery at left.	Jul '41 p9
Six-lane section near Davis.	N/D '60 p39
Davis-Dixon cut-off, typical section of divided highway, partially completed.	O '42 p10
Fill and widening operations for divided highway south of Yolo Causeway.	Jul '41 p9
W. Sacramento Fwy. under construction showing West Acres Blvd. undercrossing, I-80/Rt. 84 [Rt. 6-99] separations, Davis Hwy. ramp overcrossing, W. Sacramento underpass, State Box and 3rd. St. undercrossing, and west end of Tower Br	M/A '53 p37+
Aerial view of completed West Sacramento Fwy.	J/A '54 p6
Yolo Bypass, construction underway across.	S/O '61 p7
Completed freeway section near Davis interchange.	S/O '61 p8
Construction on bridge-fill freeway crossing of Yolo Bypass.	N/D '61 p16
I-505 [Rt. 90] Dunnigan-Vacaville Cut-off under construction near Russell Blvd.	
Interchange and twin bridges over Putah Cr.	J/A '59 p3
Netherlands Rd. [FAS Rt. 1156]; Jefferson Blvd.-Clarksburg link completed	
Section looking north from Rt. 99 near Greendale.	N/D '48 p50
Completed section near Greendale.	N/D '48 p51
Rt. 16; Woodland-Sacramento River Rd., Kiesel Crossing realignment.	N/D '52 p52
Rt. 128 [Rt. 6]; Monticello dam site area showing abandoned and relocated route.	M/A '55 p17
<b>Yuba Co.</b>	
Rt. 20 [Rt. 15], Tahoe-Ukiah Hwy.	
Parks Bar Br.-Nevada Co. line section before realignment.	S '37 p5
New highway approaches bridge with safe sight distance and curve.	S '37 p5
Section of newly completed highway.	S '37 p5
<b>Rt. 65 [US 99E]</b>	
5th and E Streets, Marysville; compacting original ground prior to placing imported borrow on realigned approach to Feather River Br.	S/O '46 p24
Section of Rt. 65 [US 99E] before and after construction repair work.	S/O '45 p28+
Rt. 70, Marysville; section with median dividers and traffic storage lanes.	N/D '66 p29

## ROUTES, Continued

### Routes By Number

#### I-5

##### Ridge Route [US 99]--See also Kern Co. and Los Angeles Co.

- Section of Ridge Route before modernization; after modernization. S/O '50 p79
- Start of construction on Ridge Route. S/O '50 p95
- Mountain highway with concrete center barrier on Ridge Route. S/O '50 p139
- Same section after modernization. S/O '50 p139

##### Westside Fwy.

- I-5 under construction along west side of San Joaquin Valley. M/A '66 p39
- Dept. of Water Resources subsidence test pond after 14 months of operation. S/O '60 p53
- After six months of operation. S/O '60 p53
- Shallow subsidence occasioned by a new abandoned irrigation ditch. S/O '60 p53

- Rt. 1 (Coast Hwy.); members of Joint Highway Dist. 9 finalizing 33-year-old cooperative project to modernize Rt. 1 between San Francisco and Santa Cruz. M/A '61 p67

#### US 50

- Huge fallen boulder closes US 50; ca 1930s, location unknown. J/A '60 p55
- Old woodcut of Emigrant Wagon Rd. in 1865 from Albert D. Richardson's book *Beyond the Mississippi*, published in 1867. S '41 p3

#### US 101; Redwood Hwy.

- Hazardous line and grade crossing on US 101. (Dist 5) O '38 p1
- Old Bell Springs route, the only route from the 1870s to ca. 1920. J/A '64 p24
- Trucks transporting loads of hay for mules and horses during Redwood Hwy. modernization, ca. 1920s. J/A '64 p248
- Unidentified divided highway section. Apr '42 p11

## SAFETY--See also ACCIDENTS; SIGNS

### Curbs

- Reflecting curbs, drawing of new type for intersectional islands, division strips. D '37 p8
- Wedge shaped recess for separation strip curbs. D '37 p8+
- Block-type recess under direct headlight rays. D '37 p8+
- Types of curbs; Section of standard conventional curb. D '37 p9
- Barrier curb study test driver shows safety features of test car. M/J '54 p34
- General operations used to conduct curb test program. M/J '54 p36

#### Precast curbs

- Spreading mortar for curb section. J/A '55 p35
- Leveling device for truing up curb. J/A '55 p35
- Typical curb nose (day) before improvement; Same location, night view. J/A '55 p36
- Day view of curb nose after installation; Night view of same. J/A '55 p37
- Unloading curb sections. J/A '55 p38
- Driving anchor steel for center divider; Setting section of center divider. J/A '55 p35

### Employee Safety

- Drivers' safety program
- Television for testing a driver's vision. J/A '54 p38
- Double cartridge braking detonator in operation. J/A '54 p40
- Division of Hwys. electrical timing device with parked testing car. J/A '54 p41

#### Roadside workers

- Surveyor W.C. Names and painted level tripod in use in District 9. N '37 p25
- Survey crew demonstrating the "Buddy System." J/A '59 p35
- Traffic on freeway inlet stopped while surveying operations are in progress. J/A '59 p37
- Survey crewman demonstrates safe method of sharpening brush cutter blade. J/A '59 p38
- Making movie to demonstrate proper safety procedure for roadside workers. J/A '66 p8
- Mock-up used for movie sequences. J/A '66 p9

## **SAFETY, Continued**

Safety supervisor with two employees who escaped serious injury in unrelated construction accidents.	M/A '55 p58
Welder wearing safety glasses which saved him from serious eye injury.	S/O '64 p66
Governor Knight's Traffic Safety Committee in session, 1956.	M/A '56 p58
<b>Guard Rails</b>	
Guard rail fabricated for curve and difference in elevation of two roadways.	Jul '42 p12
Turning movements restricted by use of metal guard rail at intersection.	Jul '42 p12
Types of flared guard railing used at bridge approach.	M/A '54 p54+
Guard rails installed to prevent collisions with trees (US 101, Leucadia).	N/D '54 p24, 63
<b>Lighting</b>	
Divisional island lighting equipment by day and by night.	S '39 p17
Fluorescent luminaire showing details of reflector.	M/J '50 p50
Fluorescent luminaries at Stockton Blvd. and Fruitridge Rd., Sacramento, showing non-glare appearance when illuminated.	M/J '50 p50
Daytime view at intersection of Stockton Blvd. and Fruitridge Rd.	M/J '50 p51
Fluorescent street lights specially designed for wet climates in place at intersection on US 101 in Arcata, Humboldt Co.	M/A '55 p50+
Freeway lighting standards with new-style tapered curve.	N/D '65 p46
<b>Pedestrian under/overcrossings</b>	
Fluorescent lights installed inside East 3rd. St. Ped. Undercrossing, Benicia.	M/J '62 p39
Close-up of fluorescent fixture.	M/J '62 p41
Night view of lighting inside Miner Ave. Ped. Undercrossing, Stockton prior to installation of fluorescent fixtures.	M/J '62 p42
Night view after installation of fluorescent fixtures.	M/J '62 p43
Old-style lighting poles in pedestrian overcrossing.	N/D '65 p49
In-the-railing fluorescent lighting fixtures installed on pedestrian overcrossing.	N/D '65 p48
Night view of pedestrian overcrossing lighted by new fluorescent fixtures.	J/F '66 p46
New fluorescent luminaire unit in chain link sidewalk railing.	J/F '66 p47
Pedestrian overcrossing with old-style luminaries mounted on standards.	J/F '66 p4
Tweedy Lane pedestrian overcrossing in L.A. with fluorescent luminaries.	J/F '66 p47
Condulet fitting on end post of chain link railing on pedestrian overcrossing	J/F '66 p47
<b>Median Barriers</b>	
Concrete center barrier for traffic protection on Ridge Route section of I-5 [US 99].	M/A '47 p31
Median barrier on Bayshore [James Lick] Fwy. in San Francisco, classified as non-traversable in median safety study.	J/A '59 p51
Curbed center strip on Hollywood Fwy., one of the deterring median designs included in safety study.	J/A '59 p51
<b>Barrier testing</b>	
34-passenger bus test-crashed into chain link barrier.	J/A '59 p9
Test-car crashes with guard rail.	J/A '59 p15+
Prize-winning photo of barrier-test car demonstrating the necessity of isolating anchorages used for chain link barrier fences.	M/A '61 p72
Beam barrier on heavily-traveled unit of I-880 (Nimitz Fwy., Alameda Co.).	S/O '61 p18
Cable barrier section on Nimitz Fwy. near San Leandro.	S/O '61 p18
Close-up of blocked-out beam barrier on Santa Ana Fwy. (L.A. Co.).	S/O '61 p21
Section of beam barrier being installed on Santa Ana Fwy.	S/O '61 p22
Repairing damaged cable barrier on Santa Ana Fwy.	S/O '61 p22
Radio controlled car crashing into barrier at 80 MPH.	N/D '61 p31
Chain-link fence forms protective barrier on freeway overcrossing.	N/D '65 p10

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**SAFETY, Continued**

**Pavement Markings**

Glass beads mixed with traffic-stripe paint	Jan '41 p17
Visibility at night of traffic line with and without beads.	Jan '41 p17
Detail of beads dropping from spoon.	Jan '41 p17
Striping machine and hopper attachment through which beads are sprayed on wet paint of stripe.	Jan '41 p17
Magnified view of glass beads used in traffic paint.	M/A '58 p40
Temporary traffic strips to delineate traffic lane being placed; Close-up of strips.	M/A '54 p48
Strips in use; night view of pavement lane markings.	M/A '54 p48
Raised buttons at night under headlight illumination in clear and rainy weather.	M/J '55 p24
Poor visibility of painted line in rainy weather.	M/J '55 p25
Experimental traffic control markings on Colorado Blvd. [St.] in Pasadena.	J/A '56 p33
"Botts Dots," various kinds of wedge and circular markers tested.	M/A '66 p26
I-80 in Solano Co. shown with markers on a rainy day and at night.	M/A '66 p27
Reflectorized pavement markers adopted for California highways during 1966.	N/D '66 p15
Improved type of painted pavement arrow.	N/D '66 p16
Safety study; movie camera mounted to windshield and operated by push button.	Jun '39 p19

**School safety patrols**

First safety patrol (Berkeley, 1923) at San Pablo Ave./Virginia St. intersection.	J/F '55 p1
Same intersection, 1954.	J/F '55 p2
Lincoln School patrol and students at Ashby St./King St. intersection, Berkeley.	J/F '55 p2
Weekly drill for safety patrols in progress at Columbus School, Berkeley.	J/F '55 p2
Safety patrol members in rain gear.	J/F '55 p3
Washington School safety patrol, San Diego, hold stop signs at intersection.	J/F '55 p4+
Students of Davis School, Stockton waiting in dividing strip on Rt. 99 [US 50-99] until patrol leaders give safety clearance.	J/F '55 p6
San Francisco area safety patrols in action.	J/F '55 p7

Sight post, reflectorized, on US 101 between South S.F. and Burlingame, being used in experimental test of night delineation of roadsides.	Jan '39 p19
Reflectorized sight posts at night.	Jan '39 p19

**Speed limits; minimum speed limits tested**

Installing tape-switch indicator for recording speeds and time of day.	J/F '67 p38
Two-lane test site, Roseville Fwy. (I-80).	J/F '67 p39
Three-lane test site, Bayshore Fwy. (US 101).	J/F '67 p39
Four-lane test site, Harbor Fwy. (I-110).	J/F '67 p39
Traffic analyzer vehicle; Interior view of vehicle.	J/F '67 p40

**Traffic Bars**

Raised white bars placed at intersections, wyees, neutral strips on divided highways, and around central placed signs.	D '40 p5
Asphalt concrete bars placed in advance of safety zones adjacent to streetcar track.	N '42 p17
City Engineer Klassen of Daly City, who devised method.	N '42 p17
Looking north on Van Ness Ave from corner of Pacific Ave.	N '42 p18
Looking south toward Jackson St.	N '42 p18
Raised white bars provide channelization at medial divider ends.	Apr '42 p8
Completed traffic bars on pavement.	J/A '52 p19
Constructing raised bars.	N '42 p17
Casting carriage for raised bars.	N '42 p18; J/A '52 p21
Proportioning and mixing machine mounted on truck.	J/A '52 p21
Applying cementing agent to pavement immediately ahead of casting.	J/A '52 p21
Casting carriage in operation.	J/A '52 p21
Trimming end of recently cast bar; Side view of casting carriage.	J/A '52 p22
General view of operations.	J/A '52 p22

## SAFETY, Continued

- Experimental traffic bars immediately after installation. J/F '56 p40  
 Test traffic bars after 2-3 months; Experimental bars after 11 months. J/F '56 p40+  
**Wrong Way driving--See also SIGNS**  
 Wrong Way Driver survey  
 Installing motion picture camera into control box for gathering data. N/D '65 p26  
 Redesigned pavement arrows to discourage wrong-way driving. M/J '65 p14  
 Spike barrier used to prevent wrong-way driving. M/J '65 p15

## SCENIC HIGHWAYS

- Governor's Advisory Committee on a Master Plan for Scenic Highways with  
 Gov. Edmund Brown. S/O '65 p54  
 Marin Co.; Sir Francis Drake Blvd., an example of a highway that is both  
 aesthetically pleasing and functional. M/A '64 p63  
 Monterey Co.  
 Rt. 1 near Big Creek Br., California's first officially designated scenic highway. J/A '65 C, i.cvr.  
 Section of Rt. 1, a portion of first official scenic highway. N/D '65 p7; S/O '66 p11  
 Placer Co.;  
 Natural beauty preserved along I-80 near Cisco Grove in the Sierra Nevada. N/D '65 p42  
 Scenic Highway Advisory Committee meeting in session, Feb. 19, 1964. M/A '64 p62  
 Members of SHAC examine model of scenic treatment of I-280 in San Mateo Co. M/J '65 p16

## SCENIC/RECREATIONAL AREAS

### Deserts

- Rainbow across desert. M/J '66 p31  
 Wildflowers blooming next to desert cacti. M/J '66 p31  
 Split Mountain area, Anza-Borrego State Park. M/J '66 p32  
 Eureka Sand Dunes near Death Valley National Monument. M/J '66 p32  
 Red Rock Canyon, northwest edge of Mojave Desert. M/J '66 p32  
 Variety of wildflowers found in eastern Mojave Desert plateau. M/J '66 p33  
 El Dorado Co.; Lake Tahoe viewed from state highway. S/O '50 112  
 Emerald Bay and Lake Tahoe. M/J '66 p26  
**Gold Country, Rt. 49 (Mother Lode Hwy.)**  
 "Bunting" hanging across road in Angels Camp advertising Jumping Frog Contest. M/J '66 p40  
 Mother Lode 4th of July celebration in Nevada City. M/J '66 p41  
 Church and cemetery in Mokelumne Hill. M/J '66 p41  
 Big wheels of Kennedy Mine in Jackson. M/J '66 p41  
 Man-powered fire engine named Papeete built ca. 1850s, at Columbia State Park. M/J '66 p42+  
 Humboldt Co.  
 Coast in vicinity of Ft. Bragg. M/J '66 p2  
 Group of smelt fisherman working near Ft. Bragg. M/J '66 p5  
 Swimming at Richardson Grove State Park. M/J '66 p7

### Inyo Co.

- Geyser in action on US 395 [Rt. 23] Mar '38 p23  
 Packer and train entering Monache Meadows. M/A '66 p20+  
 Packer leading pack train along side of Kern River Canyon. M/A '66 p22  
 Sierra redwoods and white firs in Freeman Creek Grove. M/A '66 p23#  
 View downstream along upper Kern River near Summit Creek. M/A '66 p24  
 Ford on trail across Kern River. M/A '66 p25  
 Boy Scouts hiking along trail in Lloyd Meadows near Freeman Creek. M/A '66 p25  
 Edward Montes of Div. of Hwys. at campfire in Monache Meadows. M/A '66 p25  
 Mt. Whitney; Whitney Portals Rd. leading to basin below mountain. S/O '51 p51

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**SCENIC/RECREATIONAL AREAS Inyo Co., Continued**

Inyo Craters in vicinity of Mammoth Lakes.	M/J '66 p26
Sierra in the vicinity of Bishop.	M/J '66 p28
Sierra south of Lone Pine.	M/J '66 p29

**Los Angeles Co.; Long Beach**

Panoramic view of Long Beach waterfront at night, as seen from off shore.	S/O '66 p18+
Aerial view of Long Beach Harbor showing relationship of city to harbor.	S/O '66 p20
Coeds at Long Beach College pose before modern sculpture on campus.	S/O '66 p22
One of many small craft berthing facilities in Long Beach Area.	S/O '66 p23
Long Beach Skyline as seen from harbor area.	S/O '66 p23
Public beach area.	S/O '66 p23
Submarine for oceanography study.	S/O '66 p25

Paved parking lot at beach; Canal district in Naples section of Long Beach.	S/O '66 p25
Mariposa Co.; View of Half Dome, Yosemite Valley.	M/A '51 p38

Skiers at Badger Pass winter sports area, Yosemite National Park.	M/J '66 p25
---	-------------

Mendocino Co.; surf-smelt fisherman at work, Mendocino Co. coast.	M/J '66 p5
---	------------

**Mono Co.; US 395**

Boaters at Convict Lake.	M/J '66 p24
View of Mt. Dana framed by lodgepole pines.	J/F '66 p15
Whitebark pine tree near Mt. Dana.	J/F '66 p15
Granite outcropping; Glacial cirque as seen from road to Saddlebag Lake.	J/F '66 p19
Cathedral Rocks, Yosemite National Park in winter.	M/J '66 p27
Aspens in autumn at Crowley Lake south of Lee Vining.	M/J '66 p28
Winter scene near Crowley Lake.	M/J '66 p28

**Monterey Co.**

China Cove at Point Lobos State Scenic Reserve.	M/J '66 p36
Native stand of Monterey Pines at Cannery Point.	M/J '66 p36
Seaward view of Cannery Point.	M/J '66 p37
Unorthodox view of Cannery Row, Monterey, at dawn.	M/J '66 p37
Monterey Co. coastline in Big Sur country.	M/J '66 p37
Fisherman's Wharf in Monterey.	M/J '66 p37
Rugged Monterey coast, Big Creek Br. on Carmel-San Simeon Hwy.	S/O '50 112

**Northern California coast, general**

Northern California Coast and Trinidad Head.	M/J '66 p3
Small harbor on north coast.	M/J '66 p5

Plumas Co.; Feather River in Plumas Co. viewed from highway.	S/O '50 112
--	-------------

Riverside Co.; giant Rock formation in Joshua Tree National Monument.	J/A '54 p58
---	-------------

**San Francisco**

Ghirardelli Square.	M/J '66 p34
Hyde St. cable car.	M/J '66 p34
One of San Francisco's seven hills, showing Coit Tower.	M/J '66 p35
Dragon paraded through Chinatown in Chinese New Year celebration.	M/J '66 p35

**San Luis Obispo Co.;**

Coast south of Morro Bay, part of Montana de Oro State Park.	M/J '66 p36
Sunset at Morro Bay.	M/J '66 p39

San Mateo Co.; picnickers along coast on coast road.	M/J '66 p39
--	-------------

Santa Barbara Co.; Gaviota Gorge, looking south.	M/A '51 p6
--	------------

**Shasta Co.**

Boathouse on Shasta Lake; Black Bass taken in lake.	J/A '52 p31
Burney Falls in Shasta area.	M/J '66 p9

Mt. Shasta as seen from I-5 [US 99].	S/O '50 112; M/J '66 p9
--------------------------------------	-------------------------

Sierra Co.; Sierra Buttes viewed from Rt. 49 in Sierra City.	J/A '55 p64
--	-------------



## SCENIC/RECREATIONAL AREAS, Continued

### Sierra Nevada

Snow plant, protected by California law.	M/J '66 p24
Boaters at Long Lake.	M/J '66 p24
Speed boat at unidentified Sierra lake.	M/J '66 p25
Upper Sardine Lake in Lakes Basin country, northern Sierra.	M/J '66 p26
Sierra scene reminiscent of Maxfield Parrish.	M/J '66 p26
East side of Sierra Nevada in winter.	M/J '66 p28
Typical Sierra scenes.	M/J '66 p29
Mount Whitney.	M/J '66 p29
Sonoma Co.; fishing boats in Tomales Bay, Sonoma Coast.	M/J '66 p5
Wine and grape country near Healdsburg.	M/J '66 p3
Southern California	
Family at Southern California beach; Kite Skiing; Surfers.	M/J '66 p16
Kids playing in sand at one of San Diego's ten state beach parks.	
Scenes from San Diego Zoo.	M/J '66 p21
Tehama Co.; Mt. Lassen seen across Reflection Lake in winter; Chaos Crags.	M/J '66 p9
Bumpass Hell nature trail, near summit; Mt. Lassen Volcanic National Park;	M/J '66 p11
Trinity Co.; fisherman working Trinity River near Junction City.	M/J '66 p9

## SIGNALS

### Automatic traffic signals

Traffic actuated signal on I-80 [East Shore Hwy.] at Berkeley.	S '40 p22
Signal control treadle (traffic detector), operated by car passing over it.	S '40 p22
San Diego intersection where one automatic signal controls 3,000 cars per hour.	Mar '42 p18
Traffic on US 101 at Millbrae Ave. proceeding under regulation of new traffic signal dispatcher; Close-up of new traffic signal dispatcher.	Jul '42 p9, 11
Signal in San Diego with electric brain to receives messages and operates signals.	M/A '43 p13
Market and Pacific intersection; left turn signal.	M/A '43 p13
Magnetic detector coil buried in pavement.	M/A '43 p13
Intersection on I-80 [East Shore Hwy.], Contra Costa Co., where an electric monitor governs through and turning movements on six lanes of heavy traffic.	J/A '43 p6
Incandescent globes for use in signal lamps being tested.	N/D '60 p26
Indentation of median strip provides a waiting/storage lane for left turns.	J/A '43 p7
Pedestrians on safety island awaiting effect of push button signal.	M/A '43 p13
Pedestrian "Walk-Wait" signal in operation.	M/A '43 p13
Progressive signal system unit on El Camino Real at Broadway, San Mateo.	M/J '47 p14
El Camino Real at Broadway, Redwood City.	M/J '47 p11
Traffic signal control amplified by channelization islands and separate lanes for turning vehicles.	J/A '43 p7
Traffic signal control unit used on multi-phase signals at rural intersections.	N/D '60 p47
Samples of traffic lights in bulb-life testing rack.	N/D '65 p65
Traffic signal used in one-way traffic control on Knights Landing Bridge.	J/A '49 p29
World War II; traffic signal blackout unit.	Aug '42 p4

## SIGNS

### Business District/Bypass signs

Illuminated sign directing motorists to bypassed area.	M/J '56 p11
Business District guide sign.	M/J '56 p7+
Signs directing travelers to small community and services available.	S/O '60 p29
Sign directing travelers from freeway to business route.	S/O '60 p28
Freeway turnoff sign with the word "downtown" indicating central business area.	S/O '60 p29

## **SIGNS, Continued**

Butterfly-type sign structure; Same sign at night. N/D '58 p27  
 California road signs, use of in South Pacific

Jeep driver at South Pacific naval base stops to ponder road signs. N/D '43 p20

Cantilever type sign structure. N/D '58 p30

Diamond-shaped yellow sign with reflectorized arrow indicating a curve. M/J '56 p3; S/O '60 p24

### **Directional signs**

"Cross Road," "Side Road" directional signs. M/J '47 p19

Oceanside directional sign in afternoon; Oceanside sign at twilight. M/J '51 p39

Directional information signs. M/J '56 p4; S/O '60 p25

Sign which once guided motorists in S. California, ca. 1920s-30s. M/J '56 p4; S/O '60 p24

Large directional freeway signs. N/D '61 p49

Freeway access rights public notice signs. J/F '48 p22

Freeway entrance sign prohibiting pedestrians and cyclists. M/J '64 p20

### **"Guide signs"**

Guide signs with divider between destinations in different directions. M/J '56 p5; S/O '60 p26

Guide sign which once directed motorists in Southern California. M/J '56 p4

Iron "map" which served as a guide to travelers in early days of motoring. M/J '56 p2

### **Illumination**

Experimental electro-luminescent overhead sign on Rt. 99 near Sacramento. N/D '60 p44

Illuminated sign directing motorists to bypassed area. M/J '56 p11

Bottom-mounted fluorescent sign lighting at southbound Army St. off-ramp, S.F. M/A '56 p49

Top-mounted fluorescent lighting at northbound South S.F. off-ramp, US 101. M/A '56 p49

Overhead illuminated sign bridge on freeway. J/F '59 p54

### **International traffic signs**

Members of the National Joint Committee on Uniform Traffic Control Devices  
 examine proposed international signs and their California counterparts. M/J '52 p54

Interstate signs M/J '56 p7; S/O '60 p28; N/D '61 p50

### **Maintenance of signs--See also EQUIPMENT**

Overhead sign cleaning in progress. J/A '59 p21

Sign washing on inside lane; Sign cleaning using lift tower. J/A '59 p22

Cleaning a sign on Harbor Fwy. using newly-developed catwalk. J/A '60 p43

Exposure racks used to test durability of signs and sign materials. N/D '61 p30

### **Overhead freeway signs, general**

Overhead signs on Santa Ana Fwy. at night and in daylight. N/D '51 p10

Overhead sign bridge on North Sacramento Fwy. (Bus-80). N/D '51 p11

### **Lower-case letters used in place of all capitals**

Signs using lower case letters mark exit ramp on Hollywood Fwy. J/F '51 p6

Advance "Get Ready" signs on Santa Ana Fwy. J/F '51 p6

Sign bridge featuring both lower case and all capital letters used in  
 observation study shown at night and in daylight. J/F '51 p7

Assembling and placing test signs. J/F '51 p8

Pedestrian observers recording reading distance. J/F '51 p10

Sign bridge from 400-ft. marker. J/F '51 p10

Improved type sign on Harbor Fwy. with arrow pointing down, indicating  
 proper lane for a particular exit. M/J '56 p11

Installing large freeway sign. J/A '61 p56

Overhead sign bridge. N/D '58 p25

Sign showing distance to approaching turn-offs. J/F '59 p54

Large overhead sign typical of those in use on freeways throughout state. N/D '60 p45

Typical freeway sign listing next three exits and their distances. S/O '60 p30

Sequence signing in advance of freeway junction under crowded urban conditions. S/O '60 p31

Signs giving repeated notice of an important highway turnoff. S/O '60 p32

## SIGNS, Continued

Signs giving notice of an approaching turnoff to a community from a major rural freeway.	S/O '60 p33
Sign bridge spanning both roadways of a freeway.	S/O '60 p24
Radio-control signs-- <i>See also TUNNELS Alameda Co., Caldecott Tunnel</i>	
Changing radio-control sign from maintenance station.	
Radio-control sign on I-80 [US 40] announcing road conditions.	
Variable-message speed sign on Skyline Blvd. in San Francisco.	N/D '65 p47
Flashing "PREPARE TO STOP" signs installed on I-280 near San Francisco.	N/D '65 p47
<b>Reassurance (distance) signs</b>	
Sign showing distance to Rocklin, Auburn and Truckee.	M/A '52 p55
Stone marker on US 50 showing distance.	M/J '56 p2
Larger, reflectorized reassurance (distance) signs.	M/J '56 p6
Reassurance signs showing distance to upcoming destinations.	S/O '60 p27
<b>Route markers</b>	
Rt. 89 State Sign Route marker at Lake Tahoe.	M/J '52 p55
US 40 route marker and sign showing distance to Rocklin, Auburn and Truckee.	M/A '52 p55
US 99E route marker.	M/J '52 p54
Snow-related road signs meant to enhance safety and driving conditions.	M/A '52 p57
<b>Speed limits</b>	
Example of safe speed signs being placed at curves in test program.	D '38 p24
Speed limits sign on I-80 [US 40] near the Nevada border.	N/D '60 p45
70 MPH speed zone on US 99 near Bakersfield; End of 70 MPH zone.	M/J '64 p51
65 MPH speed limit sign.	S/O '60 p24
Speed limit signs.	M/J '56 p3
Warning sign tells safe driving speed for curve zones on California highways.	Apr '39 p19
<b>Vandalism</b>	
Bullet-ridden directional sign; Bullet-ridden stop sign.	J/A '61 p58
Soda bottle stuck in large freeway sign.	J/A '61 p58
Collection of vandalized signs; Vandalized 2-post city limit sign.	J/A '61 p59
<b>Wrong Way signs</b>	M/J '65 p10+; N/D '65 p41
Lighted "Go back-you are going Wrong Way" sign at freeway exit.	J/A '64 i. cvr.
"Do Not Enter-Wrong Way" experimental signs at freeway off-ramp.	N/D '64 p8

## SNOW

Chain installation operation.	J/F '66 p26
"Chains required" signs installed on turnabout mountings.	J/F '66 p29
<b>Maintenance stations</b>	
Conway Summit maintenance station on US 395.	J/F '66 p28
Donner Summit maintenance station, showing radio towers.	S/O '50 p157
Maintenance station and crew at Yuba Pass on Donner Summit route.	Apr '38 p17
Interior of Donner Summit maintenance station, men and equipment.	Apr '38 p17
Division of Highways maintenance station at Echo Summit.	Jan '42 p23
Aerial view of Donner Summit maintenance station.	M/A '52 p46
<b>Echo Summit snow removal station (US 50)</b>	
Clearing and burning Echo Summit site, Sept. 5, 1941.	O '41 p18
General view of work operations, Sept. 15.	O '41 p18
Bunkhouse foundation forms in place Sept. 18.	O '41 p18
General view, Sept. 19.	O '41 p18
Pouring concrete on bunkhouse foundations, Sept. 23.	O '41 p19
Finishing floor of truck shed, Sept. 25.	O '41 p19
Truck shed framing being erected, Sept. 30.	O '41 p19
Floor joists on bunkhouse foundation, Sept. 30.	O '41 p19

*California Highways and Public Works*  
**PHOTOGRAPH INDEX 1937-1967**

**SNOW, Continued**

Snow fences, trees planted for.	F '38 p19
Snow poles; driving snow poles by hand.	N/D '52 p42
Poles outline road after snow storm; Poles at night with reflectors attached.	N/D '52 p43
Air hammer for driving snow poles; Air hammer in operation.	J/F '55 p35+
<b>Snow Removal</b>	
<b>Carson Pass/Rt. 88</b>	
Tractor pushing loosened snow to rotary plow, late May 1952.	M/J '52 p29
<b>Hand shoveling operations, 1923-25</b>	
Construction crew on Red Lake grade, summer, 1923.	S/O '51 p24
Top of Twin Lakes Dam; Power shovel used on project.	S/O '51 p24
Summit of Carson Pass; Snow-covered Model T.	S/O '51 p24
Looking toward Twin Lakes from Kit Carson Pass.	S/O '51 p24
Clearing snowdrift on Red Lake grade, June 1923.	S/O '51 p24
First automobile over cleared road, close to Kit Carson Pass.	S/O '51 p24
Opening of road on June 26, 1925, on Red Lake Grade.	S/O '51 p24
Clearing road-way with hand shovels.	S/O '51 p24
Tom Healy operates tractor on job.	S/O '51 p24
Tractor bulldozing snow to rotary plow on Carson Pass Hwy.	M/J '57 p31
Snow removal operations in June at Carson Pass.	N/D '65 p9
City of San Francisco train, stalled by snow.	J/F '52 p3
Rescue road to train cut through Division of Hwys. maintenance crew.	J/F '52 p3
El Dorado Co.; Echo Summit/US 50	Jan '42 p22
Snow removal operations with auger blower equipment.	Apr '37 p7
15 ft. drift on Slippery Ford grade broken through for stalled traffic.	Apr '37 p7
Close-up of auger blower rotary and crew, showing improved type equipment.	Apr '37 p7
Widening operations in deep snow necessitate repeated backing up and bucking the banks at short intervals of progress.	Apr '37 p7
Echo Summit Hwy., March 1941, before clearing.	S '41 p1
Push snow plow operating on Meyers Grade in March, 1941.	S '41 p2
Typical drift condition that prevailed at Donner Summit.	J/F '52 p5
Plow clears path through deep drift on US 50.	J/F '52 p4
Twin Bridges resort on US 50 partly destroyed by snow avalanche.	J/F '52 p12
Lake Co.; result of snow clearing work on Mineral Summit (Rt. 175) [Rt. 29] Lassen Co.	M/A '44 p4
Rotary plow and two push plows working to keep Rt. 36 open.	M/A '44 p5
US Park Service equipment working heavy drift to open Lassen Loop Hwy. in Lassen National Park.	M/J '57 p33
<b>Los Angeles Co.</b>	
Ridge Route (I-5) [US 99]; two big truck units stalled due to snowstorm.	M/A '44 p3
Snow on Ridge Route.	M/A '62 p38
<b>Rt. 2, Angeles Crest Hwy.</b>	
Merritt Ridge near Newcombe ski lift on Angeles Crest Hwy.	M/A '57 p69
Austin-Western 4-wheel drive plowing snow from parking area.	M/A '57 p71
Parking area at Newcombe ski tow near 7,000-ft elevation.	M/A '57 p71
Snow along Angeles Crest Hwy.	M/A '62 p39
Snow removal operations on Angeles Crest Hwy.	M/A '64 p33
<b>Nevada Co.; Donner Summit/I-80 [US 40]</b>	
Apr '38 p17; J/A '45 p8;	N/D '65 p22
Rotary snow plows engaged in widening operations in Donner Summit area.	F '41 p23, C.
Snow sports area of Nevada Co. near Soda Springs.	F '40 p6
Group of skiers arriving on Donner Summit for a day's sport.	F '40 p7
Truck equipment slicing down high snow bank on Donner Summit Hwy.	F '40 p8
2 views illustrating the necessity of parking regulations on snow roads.	F '40 p9

## SNOW Removal, Continued

Highway kept open in a controlled area.; traffic jam in area without control.	F '40 p9
Rotary plow hurling snow high over Donner Summit road to opposite bank.	M/A '44 p18
Motorists installing chains at Donner Summit.	M/A '44 p4
Trucks stuck in snow on I-80 [US 40] at Baxter, Jan. 11, 1952.	J/F '52 p1
Huge boulder blocking US 50 near Kyburz, Feb. 2, 1952.	J/F '52 p5
Plows working on deep drift at airport on I-80 [US 40].	J/F '52 p9, 12
Temporary end of road just west of Donner Summit Maintenance Station.	J/F '52 p10
Auger type snow plow cutting through drift east of Donner Summit.	J/F '52 p11+
Snow wall opposite ski resort in Donner Summit area, late March, 1952.	M/A '52 p44
Roadside parking at ski resort; Regulated parking near Soda Springs.	M/A '52 p45
Snow conditions at Donner Summit Lodge on I-80 [US 40].	M/A '52 p47
Squaw Valley parking lot filled with cars, skis, and skiers.	J/F '66 p27
Eastbound near Donner Lake, cleared of snow.	J/F '66 p28
<b>San Bernadino Co.; San Bernadino Mts./Rt. 18</b>	
Cars parked at Big Pines headed out of the region to prevent traffic jam.	Jan '37 p5
Blower plow at work opening road.	Jan '37 p5
Plow working way through snow drifts.	Jan '37 p5
2-way road opened through heavy drifts of "No Man's land."	Jan '37 p5
Drifts area in "No Man's Land," San Bernadino Mts.	M/J '49 p14
Snow Falls in Mojave Desert.	M/J '49 p14
Snow sports area, San Bernadino Mts.	M/J '49 p14
Snow removal operations in San Bernadino Mts.	M/J '49 p16
Rotary snow plow clearing Rt. 18 in San Bernadino Mts. between Lake Arrowhead and Big Bear.	M/A '62 p38
Snow removal crews and equipment.	Apr '38 p17
Sonora summit, snow removal crews meet on.	Jul '42 p3
Sonora highway before and after snowplow.	Jul '42 p4+
Dynamite blasts snow pack; Snowplow at work on Sonora summit.	Jul '42 p6
Rugged terrain through which Sonora Pass Hwy. runs.	M/J '57 p32
Tractor breaking up snow and ice pack, followed by rotary, as man prepares to loosen pack by blasting.	M/J '57 p31
Widening operations to clear highway of deep snow banks.	Jan '38 p4
<b>Snow removal equipment, general--See also EQUIPMENT</b>	
Auger blower rotary snow plow.	Jan '38 p4
Blade plow in action.	M/J '49 p16
Snogos in operation.	M/J '49 p16
Rotary plows dispose of snow remaining after heavy push-plow operations.	S/O '51 p30
Rotary plow in operation on Ebbetts Pass Hwy.	M/J '57 p33
Rotary plow used in areas of combined heavy snow and high traffic volume.	J/F '66 p22
Rotary plows, sand spreaders, and snow loaders at maintenance station.	J/F '66 p23
Grader in operation.	J/F '66 p23
<b>Radio-equipped snow equipment</b>	
Radio equipped snow plow working isolated mountain section of Shasta Co.	F '39 p23
Foreman in maintenance station transmitting instructions to plow operator.	F '39 p23
Radio equipped snow plow.; Radio equipment in cab of snow plow.	F '39 p23
Radio technical truck used on mountain highways.	J/F '49 p45
Radio antennae tower at Garberville.	J/F '49 p45
Over-the-snow vehicle used to service unmanned repeater station network.	J/F '66 p30
Synthetic rubber-jacketed wiring on snow-going machinery.	J/F '66 p24
Loading cinders from bunker into waiting trucks; Filling salt spreader.	J/F '66 p24
Automatic snow stake driver invented by Dist 9.	J/F '66 p25
Hydraulic snow stake driver rig.	J/F '66 p25

## **SNOW Removal, Continued**

Differential carrier and ring gear installation operations.	J/F '66 p25
Axle being bolted together and reinstalled.	J/F '66 p25
Fastening air cleaner brackets above new diesel engine.	J/F '66 p25
Modified rotary snowplow being trucked to its winter home.	J/F '66 p25
Rotary plow funneling intake into snow loader.	J/F '66 p26
Rotary snowplow in operation.	J/F '66 p27

## **Surveys**

Demonstrating how a snow sample is obtained.	May '38 p21
Snow surveyors near summit of the Sierra.	Apr '39 p4
Snow surveyors with full equipment in packs making way through snow.	Apr '39 p6
Snow surveyors at work.	Apr '39 p5; May '40 p5
Snow surveyors climbing grade on skis en route to Chilkoot Lake.	F '41 p10
Surveyors gliding down slope.	F '41 p11
Weighing core of snow taken in aluminum measuring tube.	F '41 p10
Surveyors at cabin in Sierra Nat. Forest.	F '41 p12

## **TECHNOLOGY**

### **Computers/data processing**

Checking data being received from recorder inside trailer at jobsite.	N/D '65 p26
Operators at work at the Type 604 Calculator [early computer].	J/A '55 p34
Research technician selects cards prior to processing with IBM 650.	M/A '60 p39
Computer and storage bank machine installed at Headquarters Accounting Dept.	M/J '61 p54
New type of bookkeeping machine; Bookkeeping machine in operation.	M/J '61 p55
Accounting personnel with new data processing equipment.	J/A '61 p63
Critical Path Method (CPM) of data processing workshop in session.	M/A '64 p60+
Computer Systems personnel operating IBM 1460 computer system console.	N/D '65 p50

### **Nuclear explosions, use of as excavation method**

Project Carryall model showing roadway excavation and drainage crater.	J/F '64 p57
--	-------------

### **Pipe-jacking**

Sled and trigger winch used in removing excavated materials.	M/J '55 p34
Excavated materials about to be removed.	M/J '55 p34
Jacking operations at Kellogg Hill (Los Angeles Co.).	M/J '55 p35
Equipment and two man crew used in operation.	M/J '55 p35

### **Radio Communications**

Operating FM transmitter-receiver unit in a construction field office.	S/O '58 p44
Inspectors using radio to check blueprints on Victorville-Barstow job.	S/O '58 p58
Installing passive microwave reflector on Alder Ridge, US 50.	N/D '64 p25
Installing passive repeater by helicopter in order to receive radio signals at Kyburz maintenance station on US 50.	N/D '66 p6
CBS VP Arthur H. Hayes and General Manager of KCBS receiving last minute road conditions by radio in Division of Highways radio room.	S/O '54 p49
Over-the-snow vehicle used to service unmanned repeater station network.	J/F '66 p30
Radio repeater station in Dist. 3.	J/F '66 p30
Dispatcher giving road/weather information to using a three-way combination of telephone, VHF radio, and microwave.	J/F '66 p30

### **"Talking Freeways"**

Planting message to be broadcast to motorists with vehicles equipped to receive test messages.	J/A '65 p20
Rt. 160 in Sacramento, site for experimental tests on the "talking freeway."	J/A '65 p21



# **TRAFFIC--See also MOTOR VEHICLES**

## **Bay Area**

### **BATSC (Bay Area Transportation Study Commission)**

- Gov. Edmund Brown signing BATSC bill. J/A '65 p38
- BATSC computer room. J/A '65 p39
- BATSC Survey Interviewer in home of family participating in study. J/A '65 p39
- Staff on BATSC and Association of Bay Area Government. J/A '65 p40
- Training session for in-home interviewers. J/A '65 p38
- Commuters boarding San Francisco-bound train at Palo Alto. J/A '65 p42
- Commuter parking lot for freeway bus connection at Orinda, Contra Costa Co. J/A '65 p43
- Heavy traffic on Bayshore Blvd. stopped at traffic light on 3rd. St., S.F., 1953. J/F '64 p17
- Bayshore Fwy. and 3rd. St. Overcrossing after completion of freeway, 1957. J/F '64 p17
- Making measurements on aerial photo prior to calculating enlargement factors. J/A '65 p44
- Morning inbound traffic from Contra Costa Co. approaching Caldecott Tunnel. J/A '65 p41
- Traffic congestion on East Bay approach to San Francisco-Oakland Bay Br. J/F '67 p17
- Traffic counts; traffic checker interviewing motorist. J/F '47 p23
- Truck drivers being interviewed on Washington Ave. near San Leandro. J/F '47 p24
- Interviewing drivers at External Traffic Station near San Leandro. J/F '47 p24
- Traffic on Mt. Diablo Blvd. heading east toward Pleasant Hill Rd., 1953. J/F '64 p16
- CHP motorcycle officer observing traffic on unidentified freeway. J/F '67 p21

## **Los Angeles area**

- Harbor Fwy., rush-hour traffic on. J/A '56 p9
- Merging traffic from left-hand entry. J/A '56 p8+
- Typical flow of traffic on Harbor Fwy. J/F '67 p22

### **Hollywood Fwy, traffic and, general**

- Heavy westbound traffic at Belmont Ave. pedestrian overcrossing. M/A '52 p11
- Heavy traffic on sections of Hollywood Fwy. M/A '53 p13
- Hollywood Fwy. at rush-hour, with traffic from Pasadena Fwy. merging. J/A '56 p11
- Traffic congestion on section near Belmont Ave. pedestrian bridge. S/O '53 p36
- Dense traffic on section near Bonnie Brae Ave. overcrossing. S/O '53 p36
- Peak traffic-flow on Hollywood Fwy. near Four-level structure. J/F '55 p18
- Peak-hour traffic at junction with inlet ramp for Highland Ave. traffic. J/F '55 p20
- Heavy traffic on Hollywood Fwy. near Four-level interchange. N/D '55 p38
- Peak-hour traffic near Temple St. looking toward downtown L.A. N/D '55 p39
- Traffic using only top level of Four-level interchange. J/F '56 p61
- Heavy traffic using all four levels of interchange. J/F '56 p61
- Traffic near the Four-level, 1951; Peak-hour traffic at same location, 1956. J/F '56 p61

### **Traffic problems, L.A. freeways and, general**

- Autos blocked by train on Santa Monica Blvd. F '38 p13
- N. Figueroa St. Br. over Los Angeles River showing effect on traffic making left turn for Riverside Dr. O '40 p7
- Rush hour traffic at intersection of Fletchers Dr. and San Fernando Rd. D '38 p5
- Traffic through N. Figueroa St. tunnels merging at Solano St. intersection. O '40 p7
- Typical midday traffic at intersection of Olympic Blvd. and Santa Fe Ave. D '38 p1

### **LARTS (Los Angeles Regional Traffic Study)**

- LARTS Advisory Committee meeting in progress. J/F '61 p33
- Highway Planning Survey personnel interviewing outbound traffic for LARTS study near Ventura on Rt. 1. J/F '61 p34
- Post card questionnaire coding room in Division of Hwys. Building, L.A. J/F '61 p34
- Survey interviewer questioning truck driver. J/F '61 p35
- Home interview in progress. J/F '61 p35
- LARTS study being explained to local officials in Orange Co. J/F '61 p36
- Dist. 8 personnel looking over LARTS maps. M/A '64 p38



## TRAFFIC, Continued

### Santa Ana Fwy. (I-5)

Outbound traffic on Santa Ana Fwy.	J/F '55 p20
Section at junction with I-10 under full afternoon traffic load.	J/F '57 p7
Section near Alameda St. Br. at rush hour.	J/F '55 p20
Traffic congestion at "Mixmaster" traffic interchange.	J/A '53 p18
Traffic near Civic Center, 1951. Same location, 1956.	J/F '56 p62
Santa Ana-Hollywood Fwy. on a clear day, showing large number of vehicles.	S/O '66 p13
Traffic using Four-level Interchange, Los Angeles.	J/A '56 p5, 7
Traffic congestion at intersection of 2-lane highways.	J/A '56 p6
Traffic congestion at intersection of 3-lane, one way city streets.	J/A '56 p6
Uneven distribution of truck-auto traffic on slight upgrade.	J/A '56 p7
Noise-level study test in progress on Ridge Route section of I-5 north of L.A.	J/A '66 p46
Signal used to cue participants in noise-level study.	J/A '66 p46

### Origin and destination study

Home interview being conducted for origin and destination study.	J/A '66 p40
Interviewer checking map of area sample families live in to plan her route.	J/A '66 p41
Interviewer presenting ID card to member of study family.	J/A '66 p41
Interviewer training course in session.	J/A '66 p42
Computer used to store and compile study data.	J/A '66 p43
Study data being prepared for computer by hand.	J/A '66 p43

### Traffic behavior study

Speed placement cables in operation on highway.	S '40 p17
Interior of equipment truck showing two graphic recorders on right.	S '40 p17
Passing practice study with concealed recorders.	S '40 p17
Traffic congestion on unidentified surface street.	J/F '67 p21

### Traffic counting equipment, automatic

Auto passing between automatic count machines on each side of road.	Jun '37 p7
Close-up of one of photo-electric traffic count devices.	Jun '37 p7
Counting machine open, member of Maintenance Dept. reading ticket tape count.	Jun '37 p7
Autos just passed through 2 parallel beams of infrared light projected across road.	Jun '37 p7
Typical installation of automatic traffic counter on highway.	S/O '43 p17
Recording mechanism in box; Box with lock and chain, vandalism warning sign.	S/O '43 p17
Traffic counts, historic: types of motor vehicles tabulated in early day traffic counts.	N/D '44 p18
State highway [traffic census] crew starting for work in 1913.	N/D '44 p18
Pioneer state highway crew prepares to load its wagon for field work.	N/D '44 p23
Traffic patterns, aerial motion pictures of	
Preparation and operation of captive balloon with movie camera attached.	May '39 p20
Film pictures of traffic at intersection of two arterials.	May '39 p20+

## TUNNELS & TUBES

### Alameda Co.

#### Caldecott Tunnel [Broadway Low Level Tunnels]

Original 1904 tunnel through Berkeley Hills, and first low-level tunnel under construction, 1934.	J/A '65 p13
Landvale overhead across west approach to tunnel.	D '37 p5
West portal of bore.	D '37 p5
State highway leading from Moraga Junction to east portal.	D '37 p5
Twin tubes of tunnel and lighting system.	D '37 p5
Dummy wall blocking west portal as Gov. Merriam blasts aperture.	D '37 p12
Official group at opening of Broadway Tunnel.	D '37 p13
Sketch of Oakland approach to proposed third Broadway Tunnel.	J/A '60 p31
Aerial view showing locations of existing and proposed tunnels.	J/A '60 p32

# **TUNNELS & TUBES Alameda Co., Continued**

Official guests and members of Caldecott family at renaming ceremony.	S/O '60 p60
East portal of Caldecott Tunnel on Rt. 24.	M/J '61 p17
Drilling new 2-lane tunnel to supplement existing 4-lanes at tunnel.	N/D '61 p17
East Portal, and new bore under construction on Rt. 24.	M/J '64 p32
Approach lanes and east portal of new Caldecott Tunnel.	J/A '66 p2
West portal of new Caldecott Tunnel bore.	M/J '65 p27
Exterior of nearly completed third tunnel.	J/A '65 p18
Scaffolding for construction on new portal building.	J/A '65 p15
Excavation operations using hand shovels.	J/A '65 p15
Miners at work on top level of protective jumbo.	J/A '65 p15
New tunnel excavated to roadway level.	J/A '65 p15
Concrete pouring by air-propelled placement system.	J/A '65 p15
Steel sets and timber logging supporting excavation of upper portion of tunnel.	J/A '65 p15
Concrete arch section with forms in place for ceiling above roadway.	J/A '65 p16
Tiling operations in progress.	J/A '65 p16
Existing Caldecott Tunnel and completed third tunnel.	J/A '65 p12
Small cross-tunnels used by maintenance personnel.	J/A '65 p18
Installing strip lighting for Caldecott Tunnel.	M/J '65 p29
Ventilation fans for supplying fresh air to new tunnel bore.	N/D '64 p53
Master control panel; One of two huge ventilating fans; Exhaust ducts.	J/A '65 p17
Partially completed partitioned ventilation channels above roadway.	J/A '65 p16
Foreign visitors inspect ventilation fan room in Caldecott Tunnel.	N/D '65 p65
Television camera mounted on new tunnel bore to keep maintenance personnel posted on traffic conditions.	N/D '64 p65; J/A '65 p17; J/A '66 p7
View of traffic seen on television monitor in control room.	J/A '66 p7
Tunnel control room with television monitor in background.	J/A '66 p2
Changeable message sign installed at approach to tunnel.	J/A '66 p3
Message on sign in process of changing; New message displayed on sign.	J/A '66 p3
Photo sequence showing sign message change.	J/A '66 p6
Positive barrier designed to stop vehicles from crossing over into opposing traffic lanes in raised and lowered positions.	J/A '66 p4
Popup in raised position.	J/A '66 p5
<b>Northbrae railroad tunnel-Solano Ave., Berkeley</b>	
Interior after completion, 1911; After conversion for use by auto traffic, 1962.	M/A '63 p63
Southerly end of tunnel, 1911.	M/A '63 p64
Southerly end of Solano Ave. project at Sutter St., 1962.	M/A '63 p64
Posey Tube, models of	N/D '48 p8
Aerial view of tube, indicating proposed location for Webster St. tunnel.	M/J '59 p24
<b>Webster St. Tube</b>	
Model of	N/D '48 p8
Aerial view indicating proposed location for Webster St. tunnel.	M/J '59 p24
Artist's drawings of tube construction and proposed portal building.	M/J '59 p24+
Retouched aerial photo of project site.	M/A '60 p11
Members of congressional delegation at graving dock in Alameda for casting sections of Webster St. Tube.	J/F '61 p10
Casting yard and equipment used in constructing precast tube segments.	J/F '61 p25
General tube site, showing temporary lift bridge on railroad shoofly.	J/F '61 p27
Oakland Portal Building excavation in progress.	J/F '61 p27
Tube segment being towed; Tube reinforcement and interior invert form.	J/F '61 p29
Roadway deck form being lowered into place.	J/F '61 p29
Section of interior of tube forms.	J/F '61 p30
Graving dock gate being lifted by floating derrick.	J/F '61 p31

## **TUNNELS & TUBES, Continued**

Contra Costa Co.; Caldecott Tunnel--*See Alameda Co.*

### **Del Norte Co.; Randolph Collier Tunnel, US 199 [Hazelview Tunnel]**

Crowd gathered at ground-breaking ceremony for tunnel.	S/O '60 p2
Old state highway and vicinity, showing proposed location of tunnel portals.	S/O '60 p3
Location of future north approach to tunnel.	S/O '60 p4
Driving pilot bore at north portal of tunnel.	M/J '61 p27
Drilling Collier Tunnel through mountains at Hazelview Summit.	N/D '61 p54
Construction inside Collier Tunnel.	N/D '62 p56
Heavy grading operations near south tunnel approach.	S/O '63 p3
Welder attaching brace to steel support of east footing drift.	S/O '63 p4
North portal top heading shield, supported upon footing wells.	S/O '63 p4
Excavation jumbo entering bore at south portal top heading excavation area.	S/O '63 p5
Bench jumbo drilling vertical holes prior to lowering floor of excavation.	S/O '63 p5
Correcting arch lining with pump and pipe lines.	S/O '63 p6
Grading and backfilling over tunnel at north portal.	S/O '63 p6
Crowd at tunnel dedication	S/O '63 p2
Bus entering north portal of tunnel immediately after dedication.	S/O '63 p2
Aerial view, looking toward south portal of tunnel.	S/O '63 p3

### **Lighting for tunnels--*See SAFETY, Lighting***

### **Los Angeles Co.**

#### **Broadway Tunnel**

South portal, which is to be entirely removed.	M/J '49 p19
North portal of tunnel before start of excavation operations.	M/J '49 p20
Old Broadway tunnel; Same location after replacement of tunnel by highway.	J/F '51 p17

#### **Newhall Tunnel [Fremont Pass; San Fernando Pass]; Rt. 14 [Rt. 23; US 6]**

Dirt road through Fremont/San Fernando Pass.	Jan '38 p10; M/A '64 i.cvr.
Famous Beale Cut through San Fernando-Fremont Pass Rd.	S/O '54 p34
Fremont Pass, a slot through the mountains, the most direct route from Los Angeles to the north until 1910.	S/O '50 p10; J/F '52 p25
Old Newhall Tunnel.	S/O '50 p96
Two loaded trucks attempting to pass through Newhall Tunnel.	S/O '50 p96
Various traffic problems experienced in negotiating Newhall Tunnel, 1930s.	M/A '64 i.cvr.
Newhall Tunnel, narrow bore long a serious bottleneck for traffic between L.A. metropolitan area and interior valleys.	Jan '38 p11
Narrow Newhall Tunnel through Santa Susanna Mts. being transferred into open cut as indicated by dotted line.	N '38 p4
Cut being made straight through ridge, eliminating Newhall Tunnel, 1938.	M/A '64 i.cvr.
Newhall Tunnel cut as it appeared with mountain slopes excavated.	N '38 p5
Tractors pushing dirt down for removal by shovel.	N '38 p6
Construction on Mint Canyon Cut-off east of old Newhall Tunnel site.	N '38 p7
Widening operations to eliminate sharp curve on road to old tunnel site. Santa Susanna Mt. ridge in process of being cut through to transform Newhall Tunnel into an open cut highway.	N '38 p7
Modern 4-lane section of Newhall Tunnel highway with raised central dividing strip covered with plant-mixed surfacing.	Jan '40 p16
Rt. 14 [US 6] after tunnel was eliminated.	Jan '40 p17
Section where tunnel was once situated, 1963.	S/O '50 p96
Aerial view of San Fernando Pass area.	M/A '64 i.cvr.
I-5/Rt. 14 [US 99/US 6] junction near tunnel area.	M/A '64 i.cvr.

# **TUNNELS & TUBES Los Angeles Co., Continued**

## **Rt. 2, Angeles Crest Hwy. [Rt. 61]**

Two tunnels, separated by 87-ft. of highway, being bored into	
Mt. Williamson on Angeles Crest Hwy.	D '41 C, p8
Portal of tunnel No. 2 through ridge of Mt. Williamson.	D '41 p9
Equipment mucking at main heading of tunnel No. 1, protective shell in use.	D '41 p9
Construction yard between tunnels, building concrete tunnel lining form.	D '41 p9
Equipment widening tunnel No. 1 bore, No. 2 bore entrance in background.	D '42 p19
Concrete tunnel lining form under construction for portal of tunnel No. 1.	J/F '46 p19
Construction work at Dawson Saddle; Pilot bore for Tunnel No 2.	S/O '48 p7
Westerly portal of Tunnel No. 1 near Honor Camp 37 on Angeles Crest Hwy.	N/D '56 p4

## **Marin Co.; Waldo (Marin) Tunnel**

Interior of tunnel on mountain stretch of Marin approach to Golden Gate Br.	May '37 p5
Gov. Knight and Frank Durkee inside entrance of new Waldo Tunnel.	N/D '54 p21
Mariposa Co.; Big Oak Flat tunnel in Yosemite Nat. Park.	M/J '52 p15

## **Monterey Co.; Eckhart Seed Co. freight tunnel**

Conveyor belt for Eckhart Seed Co. freight tunnel.	M/A '54 p44+
Outbound shipment of beans moving from plant to car via tunnel.	M/A '54 p45
Eckhart Seed Co. plant before construction of conveyor tunnel.	M/A '54 p43
After view showing buildings removed for right-of-way clearance.	M/A '54 p43

## **Plumas Co.; Grizzly Dome Tunnel**

Start of tunnel operations.; Completed tunnel and highway.	Aug '37 p2+
--	-------------

## **San Bernardino Co.; old irrigation tunnel reconstructed (San Bernardino Fwy.)**

Tunnel before construction; after reconstruction.	M/A '60 p6
Pouring floor slab with monorail unit; Crew placing tunnel liner.	M/A '60 p6
Forcing grout between new and old tunnel lining.	M/A '60 p6
Applying air-blown mortar to inside of new tunnel lining.	M/A '60 p6

## **San Francisco Co.**

BART; artist's rendering of planned BART train tube beneath S.F. Bay.	J/A '66 p37
---	-------------

## **Presidio Tunnel (Rt. 1, Golden Gate Br. approach)**

Erecting steel form jumbo preparatory to pouring arch for tunnel Presidio	Jun '39 p5
Pouring tunnel sidewall blocks.	Mar '39 p6
Tunnel construction by open cut method.	S '39 C
View of tunnel under golf course in U.S. Presidio.	May '40 p15

Yerba Buena Tunnel connection with World's Fair--Bay Br. Hwy.	Jun '38 p23
---	-------------

## **Yerba Buena Tunnel Reconstruction**

Movable bridge over site of tunnel reconstruction.	J/F '62 p39
Traffic crossing movable bridge at entrance to tunnel.	J/F '62 p40
View through lower level of tunnel showing center columns to be removed.	J/F '62 p40
Double mounted air hammers for breaking out upper deck and columns.	J/F '62 p40
Precast concrete girder unit on temporary staging.	J/F '62 p41
Workmen clearing lanes of equipment preparatory to shifting traffic.	J/F '62 p41
Truck backing into position with another unit.	J/F '62 p41
Moving girders into position before strengthening upper deck supports.	J/F '62 p43

## **San Mateo Co.; Mussel Rock tunnel**

Ancient tunnel and cut through Mussel Rock below Rt. 1.	M/J '56 p13
Hwy. Superintendent A.E. Cooper and Hwy. Foreman H.E. Grosser at tunnel.	M/J '56 p52

## **Santa Barbara Co., Gaviota Gorge Tunnel**

View of Gaviota Gorge showing proposed location of tunnel's south portal.	M/A '51 p10
Borings for tunnel at Gaviota Pass; Construction at mouth of tunnel.	N/D '51 p37
Tunnel lighting from south face of bore.	N/D '53 p37
Lighting, looking north inside tunnel.	N/D '53 p59
Approach to Gaviota Tunnel, US 101.	M/A '54 p63

## UTILITIES

Alameda Co.; telephone cables suspended on shoofly above completed bridge.	J/F '61 p64
Pile driver in operation between suspended phone cables and west half of new bridge.	J/F '61 p65
High voltage power line being raised to allow clearance for freeway construction.	M/A '58 p23
<b>Los Angeles Co.</b>	
Alamitos Bay/Ocean Park project	
Concrete pipe ready to be laid under San Gabriel River to supply cooling water from Alamitos Bay to Seal Beach Power Plant.	S/O '44 p14
Entrance structure to cooling pipe tunnels under San Gabriel River.	S/O '44 p15
Concrete being placed in caisson for grillage in middle section of concrete pipe cooling water tunnels built under San Gabriel River.	S/O '44 p16
Telephone ducts supported from the girders by steel straps.	S/O '60 p36
Telephone manhole contents and ducts protected by timber planks and supported above the bridge "glory hole."	S/O '60 p37
Telephone ducts supported from steel girders after bridge falsework was constructed.	S/O '60 p38
Workers preparing to release steel straps and lower ducts into final position inside concrete girder.	S/O '60 p38
Telephone ducts inside concrete box girder.	S/O '60 p39
San Diego Co.; water line relocated for freeway.	S/O '60 p14
Underground telephone conduit installation.	S/O '60 p14
Underground telephone lines temporarily suspended on poles.	S/O '60 p14
Splicing telephone cables; Temporary relocation of telephone cables.	M/A '58 p24
Texas-to-California gas line relocation, June 4, 1949	
The "Big Blow" receding after 5-1/2 million cf. of gas was blown to atmosphere.	J/F '50 p50
Upper section of old Texas-to-California gas line removed.	J/F '50 p50
New gas main lowered and ready for connecting to the main line.	J/F '50 p50
New line installed on lower level ready to connect to existing gas main.	J/F '50 p50

## WORLD WAR II-RELATED

Access roads; army trucks hauling arms through woods on dirt access road.	N '41 p3
Blackouts; traffic signal blackout unit.	Aug '42 p4
Division of Highways men at reunion in South Pacific.	J/F '45 p25
<b>Roads and bridges, inadequacy of for military vehicles</b>	
Military vehicles hampered by inadequate road.	N '40 p1
Army tanks, which some highways and bridges will not accommodate.	N '40 p2
Troops being transported across narrow and inadequate bridge.	N '40 p3
Surfacing on numerous highways of strategic value will not long stand up under the pounding of heavy mechanized army equipment.	N '40 p4
Heavy military and civilian traffic on too-narrow road.	N '40 p4
<b>Traffic near military bases and defense plans, increase of</b>	
Factory parking area and traffic congestion on 4-lane US 101 at Consolidated Aircraft Corp. plant near San Diego.	F '41 p2
Congestion of traffic on Atlantic Blvd. north of Long Beach where thousands of workers are employed at Vultee airplane plant.	F '41 p2
Traffic to and from March Field Military Aviation Reservation and Camp Haan on Perris highway in Riverside Co.	F '41 p6
Rubber/rubber conservation	
Varieties of tire damage caused by improper vehicle maintenance.	N '42 p3
Five month old guayule seedlings in government nursery at Salinas.	F '43 p11
Machine transplanting guayule seedlings.	F '43 p11
War-surplus materials	M/J '47 p1+



**PEOPLE INDEX**





## Employees

### A

Adams, Kenneth C.	N/D '57 p25
Aeppli, Ernest	J/A '61 p60
Amesbury, H. Clyde	S/O '57 p48
Andersen, Neal E.	S/O '63 p48
Anderson, A.L.	N/D '55 p45
Asbill, J.M.	M/A '61 p23
Austgen, Frank R.	J/A '55 p48
Avery, George B.	M/A '66 p48
Axtman, William F.	J/A '55 p48
Ayanian, Haig	M/A '62 p70; J/F '63 p59

### B

Bagshaw, Fred	M/J '53 p50; N/D '58 p9
Baker, Louis O.	S/O '66 p44
Balfour, Frank C.	S/O '55 p42; J/A '58 p49; J/F '61 p48
Banks, Harvey O.	J/A '56 p70
Batham, Lloyd A.	M/A '52 p29
Baxter, Frank E.	N/D '54 p36; J/A '56 p35; J/F '62 p60
Beaton, John L.	J/F '63 p57; S/O '63 p48
Bedford, Thomas A.	Jul '39 p22; M/A '51 p21
Beer, Charles G.	M/A '62 p29
Belford, Herbert E.	M/A '62 p77
Belknap, Fred R.	J/A '53 p48
Bender, O.	S/O '66 p39
Benedict, H. W.	M/A '66 p48
Bergroth, Rudolph	J/F '63 p56
Beuthel, Raymond L.	J/A '55 p47
Bezzone, A.P.	S/O '66 p39
Bigelow, Howard Thayer ("Tom")	S/O '63 p63
Birnie, A.C.	M/A '62 p70
Block, William	J/F '62 p35
Booker, B.W.	M/A '52 p25
Bosso, Oliver R.	J/F '48 p3
Botts, Dr. E.D.	J/F '60 p59
Boucher, Fred. L. and family.	J/F '65 p58
Bovey, Clarence E.	M/J '53 p50; N/D '58 p10
Bowers, H.; Dana [shade tree pioneer]	S/O '64 p60
Boyd, Anson	Jun '40 p11; M/A '62 p72
Bradford, Robert B.	J/F '59 p13; S/O '61 p1
Brianas, Chistos	J/A '66 p48
Briney, Albert C.	J/A '62 p54
Brinkerhoff, O.B.	M/J '53 p48
Brown, Paul	M/A '66 p48
Brunk, George C.	M/J '51 p42
Burns, C.R. (Bob)	M/A '62 p78
Burnside, Frank E.	J/A '53 p48
Burrill, John C.	M/A '62 p69
Busby, Forest N.	S/O '56 p38
Byroads, Harold	M/A '58 p53

## C

Caine, Chester L. [obit.]	M/J '45 p26
Campbell, L.V.	M/J '53 p48
Cardwell, Mark L.	M/J '62 p33
Carleton, C.C.	O '39 p12
Carleton, C.C.	J/F '49 p23
Carlisle, Robert J.	S/O '57 p48
Carver, Arnold; wins Hewes Award for radio communication	S/O '54 p33
Casey, Richard T.	J/A '63 p69
Chambers, Frank A.; made Chief Deputy Director	N/D '59 p19
Chase, Ralph V.	J/F '62 p25
Clark, Frank W.	Jan '39 p3; May '39 p2
Cobb, William R.	J/F '58 p59
Collins, Ray	N/D '58 p45
Colwell, Brian T.	J/A '66 p48
Cook, George N.	M/A '62 p73
Cooney, Russell J.	N/D '59 p19
Cooper, Herbert L.	S/O '52 p26
Cortelyou, Spencer V. ["Father of the Freeways"]	J/A '52 p46; S/O '49 p19;
Cowgill, Paul	M/J '64 p70
Cramer, I.F. ("Ferd")	J/F '61 p70
Crandall, Richard R.	J/F '67 p46
Crawford, Wayne H.	M/J '65 p63
Creed, John H.	M/J '62 p31
Cressy, Frank B.	M/A '63 p77
Cully, William S.	J/F '63 p58
Cushman, Freeman H.	J/A '49 p38

## D

Daniels, W. K.	J/F '55 p56
Darby, Claud H.	N/D '47 p34
Darling, Harry C.	M/A '51 p31
Datel, Robert J.	S/O '66 p44
Dauchy, Fred B.	M/A '55 p48
Davidson, John B.	N/D '53 p60
Davis, Coral Porter	J/F '62 p79
Davis, Earl David	M/J '45 p26
Deffebach, Richard	J/F '63 p43
Dekema, Jacob	S/O '55 p51; J/A '62 p35
Dennis, T.H.	S/O '49 p24
Dolliver, William S.	J/A '60 p71
D'Ooge, Leonard	Apr '42 p9
Dougherty, Clementine	M/A '59 p45
Downes, Nate W.	J/F '55 p56
Dreman, Ann	S/O '57 p58
Drew, Eldridge D.	M/J '64 p68
Dudman, Arthur F.	N/D '59 p21
Duffy, Raymond P.	S/O '55 p45
Dunckhorst, Paul	J/F '54 p50
Dunham, Neil	M/A '64 p69
Durkee, Frank B.	J/F '58 p41
Dwyer, L. B.	M/A '66 p48

*California Highways and Public Works*  
**PEOPLE INDEX 1937-1967**

**E**

Easterday, Ora T.	J/A '52 p28
Erreca, John	
As member of CHC	J/F '61 p37
Being sworn in as Director of PW	M/A '63 p42

**F**

Fahey, W.L.	M/J '54 p1
Frykland, Basil	J/A '58 p51
Funk, L.L.	M/J '56 p46; N/D '59 p20; J/A '63 p67

**G**

Gallagher, Bernard M.	S/O '57 p51
Gallagher, James	S/O '54 p60
Gatoura, N.G.	J/A '63 p69
Garrison, Fred R.	M/A '62 p77
Gatoura, N.G.	J/A '63 p69
Gay, Harvey P.	S/O '52 p27
German, Art	
J/F '67 p46	
Gibson, Lester H. [pioneer road builder]	N/D '49 p15
Gilbert, A.K.	J/A '56 p64
Gillis, Lyman R.	M/J '56 p48; J/F '60 p2
Gillis, R.M.	Apr '38 p27; N/D '50 p10; N/D '55 p42
Gilliss, C.M. (Max)	J/F '53 p49; J/F '58 p41; S/O '58 p33; N/D '58 p9
Goodwin, James H.	S/O '55 p45
Gough, William J.	M/A '53 p44
Grant, Eric P.	S/O '66 p44
Green, Clifton F.	J/F '63 p59
Green, Frank F.	J/A '62 p54
Green, John W.	M/A '60 p63
Greene, George A.	M/A '63 p11
Griffin, A. D.	J/A '60 p69
Gripper, Edward S.	S/O '49 p23; N/D '52 p57
Grumm, Fred J.	F '43 p13; J/A '50 p2
Accepting certificate from George T. McCoy.	N/D '52 p38
Accepting plaque from James C. Coombs.	M/A '57 p51
Gustafson, Charles F.	J/A '66 p48

**H**

Hansen, Ann reviewing scale model of future freeway project.	J/F '63 p64
Hellesoe, George F.; guests at retirement banquet for.	J/A '56 p35
Helwer, Sam (Dist. 1 engineer).	M/A '65 p28
Halstead, Wade O.	S/O '59 p50
Hamblin, W.H.	N/D '50 p49
Hampton, Earl W.	N/D '59 p21
Hansen, Ann	J/F '63 p48
Hanson, Emil	J/F '61 p71
Harlan, Jacob M.	S/O '53 p50
Harris, Milton	M/A '49 p41; M/A '53 p52; N/D '54 p36
Harris, Paul M.	J/A '61 p60
Hart, Alan S.	M/A '53 p53; M/A '57 p47; J/A '62 p35; J/A '64 p55

## H Continued

Hart, Samuel Alexander	Apr '38 p28
Haselwood, Fred W.	J/A '52 p47; M/J '50 p19
Hatton, Mary	S/O '56 p39
Havlik, Stanley	M/A '62 p79
Hawley, George W.	Apr '42 p19
Hawthorne, Henry	M/A '62 p77
Hayler, R.A.	J/F '57 p47
Hellesoe, George F.	J/A '56 p35
Helwer, Sam	M/A '57 p47
Henderlong, Carl A.	N/D '58 p57
Henderson August H.	F '43 p9
Henry, Ben	M/A '54 p60
Herd, Charles M. (Tex)	M/A '63 p74
Hess, Rudolph	S/O '56 p38; J/F '61 p48
Higgins, E. Roy	M/A '62 p69
Hill, George A.	J/F '60 p2; J/F '63 p43; S/O '63 p46
Hill, Harold H.	J/A '54 p60
Hill, Stuart L.	J/A '66 p48
Hilton, Albert A.	J/A '62 p55
Himelhock, Alfred L.	S/O '57 p38
Hine, Paul	J/F '61 p74
Hineman, Howard R.	J/A '65 p27
Hines, Grace Marie	S/O '65 p52
Hippenstiel, Clyde (tennis champion)	S/O '53 p48
Hixson, Claude H.	M/A '63 p79
Hodges, James M.	M/J '52 p27
Hodges, Joe B.	M/J '52 p27
Hoffman, Edgar R.	S/O '63 p31
Hollis, Robert L.	J/F '52 p49
Hollister, J.M.	N/D '50 p32
Hollister, Leonard C.	J/A '63 p71
Holmes, W.H.	O '42 p15; S/O '52 p27

## J

Jones, Robert Leroy	S '40 p25
Jones, Willis F.	M/A '53 p44
Jorgenson, J. Frank	J/F '57 p47; S/O '62 p59
Jurkovich, William J.; wins bridge design award	N/D '59 p45; S/O '66 p38

## K

Kagan, Harry L.	J/A '64 p56
Kane, Clyde V.	S/O '52 p25; M/A '53 p52
Kane, Joseph M.	S/O '56 p39
Katerndahl, Ella	M/A '59 p51
Keating, Albert	M/A '62 p79
Keaton, Morgan	Mar '40 p12
Keller, Robert N.	J/A '66 p48
Kenfield, Keith	M/J '45 p27
Kenyon, Margaret	M/J '55 p48
King, Edward F.	J/A '61 p65
Kile, Harry L.	J/A '55 p47
Kinsey, Ralph D.	M/J '65 p63

## K Continued

Klauser, Helen P.	J/A '55 p27; S/O '63 p13
Kleinman, William F.	M/A '66 p48
Koltnow, Peter G.	J/F '67 p46
Kono, Tommy [weight-lifting champ.] at his desk in drafting room; lifting barbell.	N/D '54 p30
Kozak, John J.	J/F '65 p74
Kriegh, H.R.	J/F '55 p56
Kroeck, Louis G.	S/O '66 p44

## L

LaForge, Harold B.	M/A '62 p29
Lamb, Albert L.	M/J '57 p50
Landers, Walter	S/O '64 p71
Langford, Dave	N/D '55 p47

## M

Marsden, Warren P. to Judicial Council	J/F '64 p48
Marshall, Col. Robert B.	Aug '37 p34
McCarthy, Leo J., Sr.	M/J '55 p48
McCarty, Henry C.	J/F '65 p73
McCarthy, Leo J., Sr.	M/J '55 p48
McCarty, Henry C.	J/F '65 p73
McClung, Charles A.	S/O '48 p45
McCorkle, Nathan C.	J/A '63 p63
McCoy, George T.	F '43 p8; J/A '51 p31; N/D '53 p29; S/O '59 p3; J/F '66 p41
McCoy, George T.	
McCush, Samuel (retired highway foreman)	M/A '65 p28
McDougall, George B.	O '38 p15
McElvy, Carl C.	M/J '63 p58
McGinness, Gillette G.	S/O '65 p45
McMahon, J.E.	S/O '53 p49
McManus, Frank W.	M/A '54 p58
McMillan, D.H.	J/F '56 p47
McNeely, William C.	S/O '59 p51
McPartland, John W.	S/O '54 p61
McWilliams, James T.	J/A '52 p19
Mendenhall, Kenneth	J/F '52 p48
Mickelsen, Marcia J.	S/O '66 p44
Miles, H.S.	M/A '56 p72
Miller, Carl A.	J/F '52 p48
Mitchell, Stewart	S/O '53 p49; M/A '55 p48
Montell, Frederick W.	J/A '65 p47
Montgomery, Clifton R.	M/J '50 p9
Montgomery, Cranston P.	M/A '52 p27
Montgomery, Mr. and Mrs. Z.J.	N/D '50 p33
Moore, Fred C.	S/O '65 p53
Moore, John D.	M/J '54 p62
Morgan, John P.	M/A '62 p79
Moskowitz, Karl accepting 1964 Hewes Award.	J/A '64 p19
Murphy, John P.	S/O '57 p38; J/F '60 p2
Murray, Myrtle V.	D '41 p17
Munro, Russell S., Deputy Director of PW.	M/J '54 p18

*California Highways and Public Works*  
**PEOPLE INDEX 1937-1967**

**N**

Nash, A.M.	S '42 p18; S/O '52 p25; M/A '56 p72; M/J '61 p31; S/O '62 p59
Nett, Walter M.	N/D '54 p36
Nicholson, R. I.	J/A '65 p46
Nickerson, Merrit R. [Division of Hwys. photographer]	M/J '55 p39; J/A '60 p54
Normington, Edwin B.	J/A '52 p27
Norton, Harold P.	M/A '52 p26

**O**

Obermuller, John H.	M/J '55 p48
O'Bier, Ray E.	M/A '61 p23

**P**

Packard, Luke D.	J/A '53 p49
Palm, Charles O.	N/D '50 p33
Panhorst, F.W.	F '37 p18
Parker, Earl A.	J/A '55 p49
Paule, Sidney	J/A '63 p69
Payne, H.L.	S/O '66 p39
Peck, W.E.	N/D '49 p46
Peddy, Jack E.	J/A '64 p60
Pengilly, Dana G.	J/A '63 p67
Peterson, T.C.	M/A '52 p27
Pierson, Carleton	J/A '55 p47
Pingry, George S.	S/O '56 p38
Poage, P.T.	M/J '58 p45
Pomeroy, George G.	S/O '54 p61
Pope, Charles Stockton	Apr '38 p28
Poss, E.G.	M/A '50 p32
Potter, R.V.	S/O '62 p59
Powers, Leavitt	M/A '59 p49
Powers, Meta	M/A '59 p49
Purcell, Charles H.	O '37 p23; Jan '43 p2; J/A '51 p1; S/O '51 C

**R**

Raab, Norman C.	J/F '48 p3; J/A '63 p66
Ramsey, Richard H.	J/A '62 p55
Randolph, Helen F.	J/A '54 p60
Reber, Bert A.	M/J '54 p61
Redden, L.R. (Lee)	J/F '62 p62
Rhee, Marilyn [first female Div. of Hwys. civil engineer]	M/A '55 p29
On job at 3-level San Diego-Santa Monica Fwy. Interchange.	J/F '63 p47
Reed, Ernest J.	J/A '66 p48
Reed, Robert E.	M/J '63 p63
Remington, Wilfred G.	M/A '62 p5
Reynolds, Frank M.	J/F '63 p60
Reynolds, Lloyd B.	J/F '59 p61
Reynolds, Rodney F.	M/A '61 p77
Remington, Wilfred G.	M/A '62 p5
Reynolds, Frank M.	J/F '63 p60
Reynolds, Lloyd B.	J/F '59 p61
Reynolds, Rodney F.	M/A '61 p77
Reynolds, Thomas W.	M/J '62 p60



## R Continued

Rhodes, William T.	M/A '60 p50
Richardson, G.L.	J/F '57 p47
Richardson, Rodney C.	J/F '55 p59
Ritz, John H.	S/O '60 p71
Rivett, A.I.	N/D '55 p45
Roberts, Del	J/A '60 p71
Roberts, F.N.	J/A '55 p48
Robinson, Richard W.	J/F '57 p50
Rockingham, William Henry	J/F '46 p36
Rodgers, Earl	J/A '66 p48
Root, Arthur W.	M/J '62 p58
Root, Robert H.	Jul '42 p19
Rose, Cass M.	J/A '62 p52
Rowe, R. Robinson	J/F '61 p73
Rowland, Mabel Perryman	J/F '53 p48
Rust, Clyde W.	M/J '59 p42
Ryman, Dale C.	M/A '66 p48
Ryon, Charles H.	M/A '52 p30

## S

Sachse, Franz R.; made Asst. Director of PW	F '40 p4; Jun '42 p18
Saldine, E.J.	S/O '58 p64
Schoellkopf, Andrew B.	S/O '60 p69
Schulman, Marvin A.; wins welding design award	S/O '64 p59
Schumaker, Carol	J/F '63 p46; J/F '65 p69
Checking blueprints for assignment with Design section.	J/F '65 p70
Reviewing a route-planning study with associate highway engineers.	J/F '65 p69+
Scott, Earl T. retirement party for	N/D '55 p43
Scott, Ernest R.	M/J '59 p46
Sedwick, William D.	J/A '61 p52
Seitz, Ernest L.	M/A '52 p27
Sellier, Bert	J/A '60 p62
Seymour, Lewis W.	J/F '52 p48
Sherick, Ralph M.	J/A '64 p61
Sheridan, Paul C.	J/F '65 p74
Shervington, Charles A.	M/J '61 p31
Shillito, Robert M.	S/O '51 p56
Shulman, Marvin A.	N/D '59 p45; S/O '64 p59
Simmons, Albert Edward; wins engineering doctorate	M/A '61 p75
Sinclair, Joseph P.	M/A '52 p25; M/J '59 p26; M/J '64 p69
Skeggs, Col. John (Jno.) Hunt	M/A '52 p22
Smith, George W.	N/D '47 p34
Smith, Harvey B.	J/A '63 p26
Smith, Howard M.	S/O '66 p44
Smith, James Robert	J/A '61 p51
Smith, Marian	J/F '63 p48
Smith, William A.	S/O '52 p26
Smitherum, Harrison	M/J '53 p49
Snedden, Hazeldean	J/F '63 p60
Sorenson, Earl E.	J/F '63 p57
Stalnaker, R.H.	J/F '49 p26

*California Highways and Public Works*  
**PEOPLE INDEX 1937-1967**

**S Continued**

Stalnaker, R.H.	J/F '49 p26
Standley, James G.	N/D '50 p32
Stanford, John H.	N/D '58 p51; J/F '60 p46; S/O '63 p38
Stanley, J.N.	J/A '63 p69
Stanley, Lyle	J/A '63 p26
Stanton, Thomas E.	M/J '51 p8
Stauff, James A.	M/A '51 p25
Steen, Jesse Hillery	J/F '58p42
Stein, John A.	M/A '58 p56
Stepp, Harlan L.	N/D '51 p48
Stover, Harvey D.	N/D '51 p61
Sullivan, E. Q.	J/A '50 p14
Sullivan, Mae	M/A '62 p79
Sunbury, Roger D.	M/A '62 p8
Sweet, Charles L.	M/A '62 p73
Sweet, Charles P.	M/J '60 p64
Switzer, Baynard A.	J/A '65 p45
Sorenson, Earl accepting certificate of appreciation from Safety Committee.	J/F '63 p57

**T**

Tanaka, Tek	J/A '66 p48
Taylor, Earl W.	J/F '66 p48
Teel, Roy C., Sr.	M/A '52 p29
Telford, Edward T.	M/A '53 p52; M/J '56 p14; J/A '62 p35
Templin, Newton H.	J/A '66 p47
Thomas Ira G.	J/A '50 p55
Thomas, Robert L.	M/J '48 p19
Thompson, George W.	M/A '59 p55
Thorpe, Charles E.	M/A '52 p28
Tiedemann, Edwin L.	J/F '67 p46
Tinney, Edward L.	J/F '62 p61
Trask, J.W.	M/A '56 p72; M/A '57 p47; S/O '60 p10; J/F '62 p60
Tremper, Bailey	M/A '62 p78
Tremper, Richard A.	M/A '54 p56
Trenholm, Kenneth M.	J/A '60 p68
Troop, Clarence T.	J/A '63 p69
Tudor, Ralph A.	D '40 p19; J/F '48 p3; M/J '49 p55

**V**

Van der Goes, H.C.	M/J '54 p61
Van Etten, P.H.	J/A '51 p21
Van Riper, Donald P.	J/A '64 p63
Van Stan, Robert W.	J/F '61 p75
Vellom, Dorothy S.	N/D '55 p14
Vickrey, J.W.	Mar '38 p1; Mar '38 p1; Mar '38 p1; Mar '38 p1; J/F '60 i.cvr
von Bergen, Harold E., who lost his life in flood rescue work.	Mar '40 p4

## W

Waddell Thomas B. S/O '55 p44  
Waight, Vernon H. J/A '66 p48  
Waite, Charles E. N/D '50 p10; S/O '55 p43; N/D '55 p47  
Wagner, Elton F. S/O '60 p70  
Waite, Charles E. N/D '58 p10; S/O '55 p46  
Waite, Clement F. J/F '57 p51  
Wallace, E.E. showing Mrs. Wallace wrist watch presented to him by associates. S/O '55 p43  
Wingerd, Norman J/F '67 p46  
Winslow, George R. Jun '41 p13  
Winter, C.C. ("Buck") M/J '63 p11  
Wise, Earl S. M/A '54 p60  
Withycombe, Earl N/D '50 p10  
At retirement dinner. M/A '57 p48  
Womack, J.C. N/D '55 p47; N/D '59 p20; J/F '60 p2; J/F '67 p36  
Accepting plaque naming him one of APWA's "top-ten public works men-of-the-year," 1963. S/O '63 p50  
Wood, Eleanor J/A '66 p48  
Wood, Howard C. M/A '62 p73  
Woodhams, H.E.J. J/A '61 p60  
Woodin, Clarence F. N/D '53 p61  
Woodson, James B. J/A '54 p60  
Wright, Albert F. J/F '53 p48  
Wright, James F. J/F '59 p13

## Y

Young, F.H. ("Fair") S/O '60 p69  
Younger, Robert C. J/A '61 p60

## Z

Zander, Gordon J/F '53 p48  
Zerswah, Robert E. S/O '66 p39  
Zook, Clarence V. M/J '59 p46  
Zook, Ralph W. M/A '61 p64

## Non-Employees

Caldecott, Thomas E. J/A '50 p23

### California Highway Commissioners

Baker, Harrison R. S/O '43 p5  
Ballou, Walter T. O '40 p19  
Barrett, Lawrence Apr '39 p8  
Bishop, Robert L. J/F '56 p33; S/O '58 p33  
Bozzani, Amerigo Apr '39 p8  
Bronson, John O. M/A '58 p51; S/O '58 p32  
Brown, Homer P. S/O '43 p4  
Chambers, Frank A. J/F '59 p13  
Chambers, Walter Aug '40 p20  
Chase, H. Stephen N/D '51 p21; J/F '55 p65  
Cooper, Jack N/D '59 p19  
Cristina, Vernon J. J/F '67 p13  
Darlington, Newell Dyke [member of original CHC] and Frank Durkee M/J '56 p47  
Erreca, John--See also Employees J/F '61 p37

*California Highways and Public Works*  
**PEOPLE INDEX 1937-1967**

**CHC Continued**

Guthrie, James A.	S/O '43 p4; J/F '57 p43; S/O '58 p32; J/F '61 p37; M/A '65 p67; S/O '66 p40
Heller, Alfred E.	J/A '64 p21
Hitchcock, L.G.	Apr '39 p8
Houghteling, Joseph C.	J/F '65 p24
Jennings, Fred C.	J/F '67 p12
Kennedy, Rolland Cashel (Cass)	N/D '50 p54
Kofman, Abraham	S/O '61 p5; M/A '64 p35
Lee, Moon Lim	J/F '67 p13
Leigh, Charles Thompson	M/J '49 p56
Luce, Gordon C.	J/F '67 p12
Luddy, Arthur T.	J/F '63 p17
McClure, Robert E.	J/F '54 p45; J/F '58 p24; S/O '58 p33
Maghetti, C.A.	J/F '55 p59
Nielsen, Iener W.	Apr '39 p9
Payne, Franklin S.	J/F '62 p2
Penfield, L.L.	Jul '42 p18
Purchio, John L.	J/F '60 p46
Sandelin, Walter F.	S/O '43 p5;
Savage, George W.	J/F '48 p33; S/O '49 p30
Scott, Byron N.	Apr '39 p9
Smith, Arnholt C.	S/O '43 p4;
Speers, Fred W.	J/F '55 p65; S/O '58 p32
Vaughn, Bert L.	Apr '39 p9
Warlow, Chester H.	S/O '43 p5; J/A '52 p54; J/A '58 p47; J/F '57 p43; S/O '58 p32
Whitehurst, William S.	M/A '65 p67
Woolley, Roger S	M/A '59 p33; J/F '63 p17
Brown, Elbert C. [US BPR]	M/A '57 p72
Bugge, William A. [President of AASHO]	J/F '57 p51
Camarillo, Don Adolfo at Camarillo Fwy. dedication (Ventura Co.)	S/O '53 p26
Ellis, James W. [teen appointed mock Director of PW]	J/A '56 p66
Foxen Benjamin [Foxen Rancho]	S/O '50 p43
Gibson, Phil S.	May '39 p2
Hadley, George C. [L.A. Deputy Chief Council]	J/F '64 p27
Hoberg, George [California Safety Council president]	M/J '53 p51
Hyatt, Edward	May '39 p2
Johnson, Charles G.	May '39 p2
Johnson, Alfred E. [AASHO]	J/F '55 p59
Knudsen, Mrs. Valley M. [Los Angeles Beautiful founder]	J/F '67 p46
Merrill, Gen. Frank D.	J/F '56 p53
Moore, Edwin S. [secretary and general manager of CSAA]	N/D '53 p55
Morrissey, N.J. [State Director of PVS]	N/D '53 p63
O'Neill, J.E. [head of AAA]	N/D '51 p58
MacLachlan, Kenneth A. [pioneer highway economist]	M/J '58 p47
Pegram, Reginald B. [L.A. Deputy Chief Council]	J/F '64 p27
Polk, Martin C. [pioneer engineer]	J/A '52 p29
Riley, Harry B.	May '39 p2
Tallamy, Bertram D. being sworn in as FHA	M/A '57 p51
Warren, Earl	May '39 p2
Whitton, Rex M. [AASHO, FHA]	J/F '56 p53; J/F '61 p75

**COVERS INDEX**



California Highways and Public Works  
COVER ILLUSTRATIONS 1937-1967

1937

- Jan I-80 [US 40] at Donner Summit in winter; Donner Lake in background
- Feb Valley Blvd. as seen through orange groves near Pomona
- Mar Kennett Dam, key unit of Central Valley Project [color drawing]
- Apr US 395; Eastern slope of the High Sierra north of Bishop (Inyo Co.)
- May Golden Gate Bridge across entrance to San Francisco Bay [color drawing]
- Jun Rt. 1 (Ocean Shore Hwy.) under construction in San Mateo Co.
- Jul Rt. 1; Carmel-San Simeon Hwy., where sea and mountains meet
- Aug Rt. 70 [US 40-Alt.], the Feather River Hwy. and its bridges.
- Sep Rt. 99; stretch of new state highway in Kern Co.
- Oct Alameda Co.; construction activity in Altamont Pass
- Nov Rt. 136-190; Lone Pine--Death Valley Hwy. (Inyo Co.)
- Dec Rt. 1; Ocean Shore Hwy. just opened in San Mateo Co.

1938

- Jan US 101; new four-lane divided highway through Montecito
- Feb North Figueroa St. Viaduct on Rt. 159 [Rt. 165] in Los Angeles
- Mar Clearing I-80 [US 40] over Donner Summit during snow storm
- Apr Main line railroad bridge across Los Angeles River wrecked by flood
- May Mt. Shasta seen from I-5 [US 99]. Sacramento River in foreground
- Jun Rt. 180 under construction in Kings River Canyon (Fresno Co.)
- Jul Rt. 203 [Rt. 112] Mammoth Lakes Hwy. near Twin Lakes (Mono Co.)
- Aug US 50; Echo Summit relocation
- Sep Rt. 123 [Leg. Rt. 14] showing circuitous alignment (Contra Costa Co.)
- Oct Rt. 46 [Rt. 33]; York Mt. Grade, Cayucas--Templeton (San Luis Obispo Co.)
- Nov Rt. 41; Squaw Valley Grade near General Grant National Park (Fresno Co.)
- Dec Topanga Canyon road, showing winding grade and narrow bridge (L. A. Co.)

1939

- Jan Culbert L. Olson, Governor of California. Inaugurated January 2 1939
- Feb Rt. 78; winding section between Julian and Descanso (San Diego Co.)
- Mar Shasta Dam under construction scenes at site on Sacramento River
- Apr Snow surveyors measuring water content of Sierra pack
- May Redding; railroad bridge across Sacramento Rvr. under construction
- Jun I-80 [Rt. 37; US 40]; Donner Lake and view from Donner Summit
- Jul Rt. 14 [Rt. 23]; Newhall Tunnel Hwy. from historic Freemont Pass (L.A. Co.)
- Aug Rt. 17 [Rt. 5] between Los Gatos and Santa Cruz
- Sep Presidio Tunnel approach to Golden Gate Br. under construction, S.F.
- Oct Rt. 180; completed Kings River Canyon Hwy. (Fresno Co.)
- Nov Pit River Bridge across site of Shasta Dam Reservoir [drawing]
- Dec Friant Dam [drawing], and scenes at ground breaking



*California Highways and Public Works*  
**COVER ILLUSTRATIONS 1937-1967**

**1940**

Jan Rt. 14 [Rt. 23]; four-lane highway eliminating Newhall Tunnel (L.A. Co.)  
 Feb Snow removal scene on Donner Summit (I-80) [US 40]  
 Mar View from Donner Summit after snow removal (I-80) [US 40]  
 Apr Flooded orchard and farm lands near Princeton, Colusa Co.  
 May Rt. 1; slide prevention work on Pacific Palisades (L.A. Co.)  
 Jun Treasure Island in San Francisco Bay  
 Jul US 101; Redwood Hwy. through Culbert L. Olson Grove (Humboldt Co.)  
 Aug US 50; rugged scenery on Echo Summit relocation over the Sierra  
 Sep Carquinez Toll Br. across Straits of Carquinez on I-80 [US 40]  
 Oct Arroyo Seco Pkwy. (Rt. 110) between Los Angeles and Pasadena  
 Nov Rt. 1; San Simeon--Carmel Coast Hwy. and Big Creek Br.  
 Dec Russian Gulch concrete arch bridge (Rt. 1, Mendocino Co.)

**1941**

Jan Arroyo Seco Pkwy. showing divided hwy., paved channel, and overheads  
 Feb Rotary snow plow widening and clearing I-80 [US 40] near Donner Summit  
 Mar Pit River Bridge under construction on I-5 [US 99], Shasta Co.  
 Apr Surveyors measuring snow depths and water content  
 May "Kneeling Nuns" of Red Rock Canyon (Rt. 14 [US 6], Kern Co.)  
 Jun Orleans Br. across Klamath River on Rt. 96 (Humboldt Co.)  
 Jul Section of Tioga Pass Hwy., Mono Co.  
 Aug Bridge across Sacramento River at Antler on US 99 Shasta Dam relocation  
 Sep Ocean Shore Hwy. under construction between San Francisco and Santa Cruz  
 Oct Pit River Br. across Shasta Dam reservoir lake nearly completed  
 Nov "California Highways and National Defense" military montage  
 Dec Rt. 2, Angeles Crest Hwy. as seen from point between two tunnels (L.A. Co.)

**1942**

Jan US 50 at Strawberry looking east to Echo Summit  
 Feb Feather River Canyon, Plumas Co. in winter, seen from Rt. 70 [US 40-Alt.]  
 Mar through Dec Montage of Public Works projects

**1943**

Jan Earl Warren, Governor of California  
 Feb Same as March 1942. [**Last monthly issue**]  
 Mar-Apr through Nov-Dec Same as March 1942

**1944**

Jan-Feb Winter scene on US 50 across the Sierra Nevada  
 Mar-Apr Blossom time along Rt. 9 in Santa Clara Co.  
 May-Jul Leavening grade on Rt. 120, Tioga Pass entrance to Yosemite  
 Jul-Aug Mulholland Overhead grade separation on Hollywood Fwy., L.A. Co.  
 Sep-Oct Lake Mary from Rt. 203 [Rt. 112], Mammoth Lakes area (Mono Co.)  
 Nov-Dec Rt. 14 [Rt. 23] through Red Rock Cyn on Mojave Desert, Kern Co.

*California Highways and Public Works*  
**COVER ILLUSTRATIONS 1937-1967**

**1945**

**Jan-Feb** Rt. 180, Kings River Canyon Hwy., Fresno Co.  
**Mar-Apr** I-5; Pacific Hwy. [US 101, Rt. 2]: Torrey Pines Mesa, San Diego Co.  
**May-Jun** I-80 [US 40, Rt. 69]; East Shore Hwy. in Oakland along San Francisco Bay  
**Jul-Aug** Carquinez Bridge  
**Sep-Oct** Rt. 1 [US 101, Roosevelt Hwy.] north of Santa Monica  
**Nov-Dec** Trees draped in snow along Rt. 89, West Shore Lake Tahoe

**1946**

**Jan-Feb** Shasta Dam and reservoir (color)  
**Mar-Apr** I-80 [US 40] near Gold Run, Placer Co.  
**May-Jul** Donner Lake on I-80 [US 40]  
**Jul-Aug** Rt. 37, Black Point Cut-off between Napa and Ignacio (Sonoma Co.)  
**Sep-Oct** Rt. 24 at Orinda Junction (Contra Costa Co.)  
**Nov-Dec** San Francisco-Oakland Bay Br. showing Western Terminal

**1947**

**Jan** [AASHO special issue] Delegates at 32nd annual meeting of AASHO  
**Jan-Feb** I-10 [US 99] in San Bernadino Co. looking north toward Redlands  
**Mar-Apr** Rt. 120, Tioga Pass Hwy. mountain scene (color)  
**May-Jun** Sheep grazing alongside Sign Rt. 89 in Hope Valley, Alpine Co.  
**Jul-Aug** US 101 north of Salinas, Monterey Co., 4-lane divided highway section  
Highway leading to Mt. Shasta  
**Sep-Oct** I-80; North Sacramento Fwy, opened Oct. 6, 1947  
**Nov-Dec** Terminal Island Fwy under construction (Los Angeles Co.)

**1948**

**Jan-Feb** I-80 [US 40] through Auburn, Placer Co.  
**Mar-Apr** Rt. 163 [US 395], Cabrillo Fwy., San Diego Co.  
**May-Jun** US 101; Montecito Pkwy. viewed from Ortega Hill (Santa Barbara Co.)  
**Jul-Aug** US 101; Hollywood Fwy. [Cahuenga Fwy.] in Los Angeles  
**Sep-Oct** US 101, San Luis Obispo Co., a four-lane divided freeway  
**Nov-Dec** Trees across street from Public Works Building, Sacramento (color)

**1949**

**Jan-Feb** I-80 [US 40] widening operations through American Canyon Cut-off  
**Mar-Apr** Hollywood Fwy. (US 101) between Barnam Blvd. and Vineland Ave.,  
Bayshore Fwy (US 101), showing San Bruno Interchange  
**May-Jun** I-5 [US 99]; Ridge Route at junction with Rt. 126 [Rt. 79] to Ventura  
**Jul-Aug** Four-Level Structure, Los Angeles  
**Sep-Oct** US 50 near Kyburz, El Dorado Co. (color)  
**Nov-Dec**

*California Highways and Public Works*  
COVER ILLUSTRATIONS 1937-1967

**1950**

- Jan-Feb** I-10 [Rt. 26] divided highway at Redlands, San Bernardino Co.
- Mar-Apr** California State Capital and surrounding area, aerial view
- May-Jun** US 101 divided highway between Oxnard and El Rio Junction
- Jul-Aug** Lake Tahoe as seen from I-80 [US 40]
- Sep-Oct** Centennial Edition 1850--1950
- Nov-Dec** Blasting in Piru Gorge on I-5 [US 99], Ridge Route

**1951**

- Jan-Feb** Hollywood Fwy. (US 101) section dedicated Dec. 27, 1950
- Mar-Apr** US 101 through historic Gaviota Pass (Santa Barbara Co.)
- May-Jun** Bayshore Fwy. (US 101), first unit completed within city of S.F.
- Jul-Aug** Rt. 1 on Pedro Mt., San Mateo Co.
- Sep-Oct** Charles Henry Purcell, 1883-1951
- Nov-Dec** Balancing Rock on Rt. 158 [Rt. 111] leading to June Lake, Mono Co.

**1952**

- Jan-Feb** Snow battle scene on I-80 [US 40] during record 1952 storm
- Mar-Apr** Colorado St. Bridge under construction, Pasadena
- May-Jun** Yuccas in bloom along I-15 [US 395] near Cajon Pass, San Bernardino Co.
- Jul-Aug** Burney Falls, Shasta Co.
- Sep-Oct** Rt. 4 leading to Calaveras Big Trees
- Nov-Dec** Farm-to-Market roads feed into Arnold Industrial Fwy., Contra Costa Co.

**1953**

- Jan-Feb** Trees in Sierra draped with snow
- Mar-Apr** Four-level Structure, Los Angeles
- May-Jun** Indian Head rock formation in Riverside Co.
- Jul-Aug** Donner Lake on I-80 [US 40] (color)
- Sep-Oct** Safety message featuring Smokey the Bear
- Nov-Dec** Goodwin J. Knight, Governor of California
- Nov-Dec** San Quentin Wye near San Rafael, Marin Co.
- Nov-Dec** First snowfall of season at Echo Summit, US 50
- Nov-Dec** Shores of Lake Mary, Mono Co.

**1954**

- Jan-Feb** Four-level Structure in heart of L.A. Freeway System, night view
- Mar-Apr** I-15 through Blue Cut Area near Cajon Summit (San Bernardino Co.)
- May-Jun** Bald Rock Canyon in Middle Fork of Feather River
- Jul-Aug** Lake Alminor in Plumas Co.
- Jul-Aug** Skyline views upon entering San Francisco on Bayshore Fwy. from south
- Sep-Oct** Safety message featuring Smokey the Bear
- Sep-Oct** US 50 at Strawberry (El Dorado Co.) (color)
- Nov-Dec** Owens Valley as seen from US 395 at Olancha (Inyo Co.)

*California Highways and Public Works*  
**COVER ILLUSTRATIONS 1937-1967**

**1955**

- Jan-Feb** School Safety Patrol leader on duty at Whitter School, Berkeley (color)  
**Mar-Apr** San Francisco skyline as seen entering central district from Bayshore Fwy.  
**May-Jun** San Luis Obispo freeway (US 101) (color)  
**Jul-Aug** Highway relocation along Laurel Dell Lake on Rt. 20, Lake Co.  
 Safety message featuring Smokey the Bear (b&w)  
**Sep-Oct** Arch in Natural Bridges State Park, Santa Cruz  
 Fallen Leaf section of Lake Tahoe viewed from Rt. 28 [Rt. 94]  
**Nov-Dec** Sherwin Grade in Inyo-Mono Counties, covered in snow

**1956**

- Jan-Feb** Four-lane divided section of I-5 [US 99] at foot of Mt. Shasta  
**Mar-Apr** Golden Gate Bridge  
 San Francisco--Oakland Bay Bridge  
**May-Jun** Wild flowers in bloom along Rt. 119 [US 399] in Arvin Dist., Kern Co.  
 Fields in bloom near Hollister, Rt. 156 [Rt. 22], San Benito Co.  
**Jul-Aug** Richmond--San Rafael Br.  
 Safety message featuring Smokey the Bear (b&w)  
**Sep-Oct** Trees along Luther Pass Hwy. (Rt. 89) west of Lake Tahoe in autumn  
 Rt. 70 [US 40-Alt]; Feather River Hwy., Plumas Co.  
**Nov-Dec** June Lake on Rt. 158 [Rt. 111] covered in blanket of snow (Mono Co.)  
 Light pattern created by headlights on Harbor Fwy.

**1957**

- Jan-Feb** US 101; San Luis Obispo Fwy. at Shell Beach  
 Model of depressed freeway and adjacent residential area  
**Mar-Apr** University Ave. Interchange, Berkeley  
 Rt. 24, Lafayette Bypass (Contra Costa Co.)  
**May-Jun** Kings River Canyon Recreational Area (Fresno Co.)  
 Coyote Dam area before dam construction (Mendocino Co.)  
**Jul-Aug** Cypress St. double-deck freeway, Oakland  
 Safety message featuring Smokey the Bear (b&w)  
**Sep-Oct** US 101 paving job for Paso Robles Bypass (San Luis Obispo Co.)  
 US 101, Redwood Fwy.; construction on "big cut" (Humboldt Co.)  
**Nov-Dec** Downtown Los Angeles looking north along Harbor Fwy.  
 I-5; Golden State Fwy. near Rt. 14/I-5 [US 6/US 99] interchange

**1958**

- Jan-Feb** Rotary snow plow clearing section of I-80 [US 40] at Donner Summit  
 Rt. 18 in Mojave Desert near Apple Valley [See M/J '58 p44]  
**Mar-Apr** Superstructure of parallel Carquinez Br. seen from piers of south approach  
 Bay Br. as seen from Yerba Buena Island  
**May-Jun** US 101 at Bridges Cr. in northern Mendocino Co.  
 Rt. 70 [US 40-Alt.] at Elephant Butte Tunnel in Plumas Co.  
**Jul-Aug** Rt. 193 [Rt. 93] passing through Broom in bloom (El Dorado Co.)  
 Stanislaus Rvr. Br. between Sonora and Angeles Camp, Rt. 49  
**Sep-Oct** Rt. 14 [US 6] in eastern Kern Co. near Red Rock Canyon  
 Bixby Creek Br. on Rt. 1 (Monterey Co.)  
**Nov-Dec** Lighthouse at western terminus of I-8, Cabrillo Nat. Park (San Diego)  
 Grout Bay camp-ground along Rt. 18 near Big Bear Lake

*California Highways and Public Works*  
**COVER ILLUSTRATIONS 1937-1967**

**1959**

- Jan-Feb** Light pattern created by autos on Hollywood Fwy. approaching City Hall Santa Ana Fwy. (I-5) crossing under roadway of Long Beach Fwy. (I-710)
- Mar-Apr** Interchange at junction of Rt. 1 and Rt. 17 in Santa Cruz  
 Traffic using parallel Carquinez Br., widening of old span
- May-Jun** Rt. 60 west of Beaumont in San Bernadino Co.  
 All American Canal Br. on I-8 [US 80], Imperial Co.
- Jul-Aug** I-80 [US 40] passing under Magazine St. Overcrossing in Vallejo.  
 US 50 east of Echo Summit, starting down Meyers Grade
- Sep-Oct** Rt. 168 near Huntington Lake in Fresno Co.  
 US 101; landscaped section near Mission San Luis Obispo
- Nov-Dec** I-5 [US 99] expressway north of Shasta Lake  
 US 101 in Rattlesnake Canyon north of Laytonville (Mendocino Co.)

**1960**

- Jan-Feb** 65 MPH signs on I-80 near Nevada state line, in effect Jan. 1, 1960  
 Mulholland Summit Cut on San Diego Fwy. (I-405) in Los Angeles  
 Santa Monica-Harbor Fwy. interchange under construction
- Mar-Apr** I-880; landscaped section of Nimitz (Eastshore) Fwy. through Oakland  
 Rt. 24; landscaping at Pleasant Hill Rd. interchange
- May-Jun** Installation of large directional signs on Walnut Creek Bypass  
 Ventura--San Diego Fwy. interchange and vicinity (**front and back cover**)
- Jul-Aug** I-5 [US 99] under construction in Sacramento Rvr. Canyon near Dunsmuir  
 Mission Valley interchange for I-8/Rt. 163 [US 80-395], San Diego
- Sep-Oct** I-5 [US 99]; downhill view of widened Grapevine Canyon section  
 Folsom Lake at Mormon Island State Park
- Nov-Dec** I-80; improved section between Hampshire Rocks and Soda Springs  
 Webster St. Tube, Alameda; precast tube segments being cast

**1961**

- Jan-Feb** Landscaping on US 101 at Cabrillo Blvd. interchange, Santa Barbara  
 Santa Monica Fwy. (Rt. 60) under construction
- Mar-Apr** San Diego Fwy. through San Clemente showing typical freeway signing  
 Hazelview Summit Tunnel, drawings of (US 199, Del Norte Co.)
- May-Jun** I-80 plantings through Richmond at Solano Ave. Overcrossing  
 Noyo River Br. (Rt. 1, Mendocino Co.) painted green
- Jul-Aug** Painting main cables of San Francisco--Oakland Bay Br.  
 US 101 through Pismo Beach (San Luis Obispo Co.)
- Sep-Oct** Harbor Fwy. (I-110) through downtown Los Angeles  
 US 101 between Willits and Laytonville (Mendocino Co.)
- Nov-Dec** I-5 [US 99] south of Dunsmuir, Siskiyou Co.  
 Grading work on Rindler Fill section of I-80 [US 40] near Vallejo

*California Highways and Public Works*  
**COVER ILLUSTRATIONS 1937-1967**

**1962**

- Jan-Feb** Redwood Parks area of US 101 between Meyers Flat and Dyerville  
 Landscaped section of San Diego Fwy (I-405) near Sunset Blvd.
- Mar-Apr** I-5 [US 99], Ridge Route section, covered in snow  
 Rt. 49 between Auburn and Grass Valley
- May-Jun** W. Branch Br. across N. Fork Feather Rvr. carrying relocated Rt. 70  
 US 101 at Goleta (Santa Barbara Co.)
- Jul-Aug** Rt. 29-128 south of Calistoga (Napa Co.)  
 Golden State Fwy. (I-5) near Griffith Park Rd.
- Sep-Oct** Turnbridge Dr. pedestrian overcrossing on US 50-99 near Sacramento  
 Ventura Fwy. (US 101) under construction in city of Ventura
- Nov-Dec** Redlands Fwy. (I-10) [US 70-99] at Cypress Ave. Undercrossing  
 Benicia--Martinez Toll Br. and SP railway bridge

**1963**

- Jan-Feb** Cable spinning on Vincent Thomas Br. (San Pedro--Terminal Island)  
 Time exposure night photo on I-80 [US 40] near Albany
- Mar-Apr** Wildflowers along Rt. 46 [US 466] near Arvin turnoff (Kern Co.)  
 San Diego Fwy. across Sepulveda Pass near Mulholland Drive Br.
- May-Jun** Assistant State Hwy. Engineer Steve Macola conducting survey work  
 Rt. 24 freeway between Walnut Creek and Lafayette
- Jul-Aug** Rt. 49 (Mother Lode Hwy.) near Jacksonville  
 Vincent Thomas Br. between San Pedro and Terminal Island
- Sep-Oct** Flagman directing traffic on Rt. 18, San Bernadino Co.  
 Cold Springs Canyon Br. painting (Rt. 225 [Rt. 150] Santa Barbara Co.)
- Nov-Dec** US 101 (Redwood Hwy.) through Avenue of the Giants.  
 Elysian Viaduct Br. carrying Golden State Fwy. over Pasadena Fwy.

**1964**

- Jan-Feb** Expressway west of Twain Harte, Rt. 108 (Sonora Pass Hwy.)  
 Rotary plow in operation on I-80 near Kingvale
- Mar-Apr** Installing new sign on former US 101-Alt at Pt. Mugo, now part of Rt. 1  
 US 101 freeway section in Santa Barbara
- May-Jun** Bay Br. at night, illustrating change to one-way traffic [See J/A '64 p59]  
 San Diego Fwy. (I-405) in Los Angeles
- Jul-Aug** Rt. 1 near Carmel--Pacific Grove Hwy. and 17-mile Drive interchange  
 San Diego Fwy. (I-5) near 4-level junction and Balboa Park
- Sep-Oct** Drawing of future I-280 through Los Altos Hills  
 US 101 freeway (Redwood Parks Fwy.) near Myers Flat.
- Nov-Dec** Donner Pass, showing old US 40 route, new I-80 Fwy.  
 Do Not Enter--Wrong Way signs at I-80 off-ramp near Sacramento

*California Highways and Public Works*  
COVER ILLUSTRATIONS 1937-1967

**1965**

- Jan-Feb** Roadside rest area overlooking Pacific Ocean at McKinleyville, US 101  
Landsaped section of US 99 at Tulare
- Mar-Apr** Golden State Fwy. (I-5) landscaping  
Bailey Br. in place across washed-out span of Smith River on US 199
- May-Jun** US 101 through Waldo Grade north of Golden Gate Br.  
W-X Street Br. under construction over Sacramento Rvr., Sacramento.
- Jul-Aug** California's first officially named "Scenic Hwy.," Rt. 1 along Pacific Coast  
Interior of third Caldecott Tunnel
- Sep-Oct** Before and after views of US 99 in Modesto  
Quaking aspen grove along Rt. 89 in Monitor Pass region
- Nov-Dec** Raking leaves on median of Cabrillo Fwy. (Rt. 163) through Balboa Park  
Replacing sidehill viaduct at Dodge Pt. near Tioga Pass summit, Rt. 120

**1966**

- Jan-Feb** Montage of snow removal operations  
Rim of the World Dr. (Rt. 18) through San Bernadino Range in winter
- Mar-Apr** Rt. 88 near Carson Pass summit  
Evening in Los Angeles on Harbor Fwy. near Civic Center
- May-Jun** Mojave Desert wildflowers; Zannetta House, San Juan Bautista; Yosemite  
in winter; Carpenteria State Beach; E Clampus Vitus initiation in Volcano;  
US 395 south of Lone Pine; Fishing in Big Sur River; Sanctuary and Eye  
of God, Mission San Miguel; Sonoma Coast  
Unidentified California Beach
- Jul-Aug** Filming correct procedure for protecting maintenance workers from traffic  
Rt. 58 where road begins to climb to Tehachapi Pass (Kern Co.)
- Sep-Oct** Car towing boat on freeway ramp, city of Long Beach  
View of aspens and mountains from US 395, Conway Summit.
- Nov-Dec** Montage of construction projects statewide (**front and back cover**)

**1967**

- Jan-Feb** Los Angeles freeway at night  
Unidentified section of highway in mountainous area (**final issue**)





the 1990s, the number of people with a mental health problem has increased by 50% (Mental Health Act 1983, 1990).

There is a growing awareness of the need to address the needs of people with mental health problems. The Department of Health (1994) has set out a strategy for the future of mental health services. This strategy is based on the principles of recovery, self-help, and community care. The strategy aims to improve the lives of people with mental health problems by providing them with the support and resources they need to live well. The strategy also aims to reduce the stigma and discrimination that people with mental health problems often experience.

One of the key challenges in implementing this strategy is the need to develop a workforce that is skilled in providing recovery-oriented care. This workforce needs to be able to work in partnership with people with mental health problems and their families. It also needs to be able to provide a range of services, including psychological therapies, social skills training, and housing support.

One of the ways in which this workforce can be developed is through the use of self-help materials. Self-help materials can provide people with mental health problems with the information and skills they need to manage their condition. They can also provide people with the support and resources they need to live well. Self-help materials can be developed in a variety of formats, including books, pamphlets, and audio and video materials.

One of the challenges in developing self-help materials is the need to ensure that they are accessible to people with mental health problems. This means that the materials need to be written in a clear and simple way. They also need to be written in a way that is respectful of people's experiences and beliefs. Self-help materials also need to be evaluated to ensure that they are effective in helping people to manage their condition and live well.

One of the ways in which self-help materials can be evaluated is through the use of qualitative research. Qualitative research can help researchers to understand the experiences and beliefs of people with mental health problems. It can also help researchers to understand the barriers and facilitators to the use of self-help materials. Qualitative research can be used to develop self-help materials that are tailored to the needs of people with mental health problems.

One of the challenges in using qualitative research to develop self-help materials is the need to ensure that the research is conducted in a way that is respectful of people's experiences and beliefs. This means that researchers need to be able to build a rapport with people with mental health problems. They also need to be able to listen to people's stories and understand their experiences. Qualitative research can be used to develop self-help materials that are tailored to the needs of people with mental health problems.

One of the ways in which self-help materials can be developed is through the use of participatory research. Participatory research involves people with mental health problems in the development of self-help materials. This can help to ensure that the materials are relevant and useful to people with mental health problems.